

Suubi4Stigma

Addressing HIV-Associated Stigma Among Adolescents

**Adolescent Baseline Report
2020/2021**



SUUBI4STIGMA: ADDRESSING HIV-ASSOCIATED STIGMA AMONG ADOLESCENTS

Adolescent Baseline Report 2020 - 2021

AUTHORS:

Proscovia Nabunya
Fred M. Ssewamala
Ozge Sensoy Bahar
Flavia Namuwonge
Migadde Herbert
Vicent Ssentumbwe
Natasja Magorokosho
Wilberforce Tumwesige
ICHAD Team – Uganda Field Office

Affiliations:

Washington University in St. Louis
Brown School
International Center for Child Health and Development (ICHAD)

RESEARCH COLLABORATION

Washington University in St. Louis
Reach the Youth Uganda

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SUUBI4STIGMA STUDY TEAM

**Main Funding
Agency:**

National Institute of Mental Health (NIMH)

**Principal
Investigators:**

Proscovia Nabunya, PhD
Research Assistant Professor
Co-Director, ICHAD
Brown School, Washington University in St. Louis

Fred M. Ssewamala, PhD
William E. Gordon Distinguished Professor
Associate Dean for Transdisciplinary Faculty
Research
Founder and Director, ICHAD
Brown School, Washington University in St. Louis

**In-Country Principal
Investigator:**

James Mugisha
Senior Lecturer, Kyambogo University
Senior Researcher, Makerere University,
Kampala, Uganda

Co-Investigators:

Ozge Sensoy Bahar, PhD
Research Assistant Professor
Co-Director, ICHAD
Brown School, Washington University in St. Louis

Jean-Francois Trani, PhD
Associate Professor
Brown School, Washington University in St. Louis

Consultants:

Mary M. McKay, PhD
Vice Provost for Interdisciplinary Initiatives
Washington University in St. Louis

Torsten Neilands, PhD
Professor, Center for AIDS Prevention Studies
University of California San Francisco

**In-Country
Implementation
Partners:**

Abel Mwebembezi, PhD
Executive Director, Reach the Youth-Uganda

**In Country Research
Team:**

Betina Nabisere	Fatumah Nakabuye
Flavia Namuwonge	Scovia Nassaazi
Milly Nabulime	Florence Namuli
Jane Namulindwa	Ivan Menya
Herbert Migadde	Medress Nansubuga
Vicent Ssentumbwe	Sarah Nanono
Juliet Nambooze	Sylvia Nannono
Flavia Nanteza	Jacqueline Nanteza
Edward Nsubuga	Francis Ssebbula
Godfrey Ssekikubo	Gertrude Nabbosa
Fred Ssenyonjo	Ronald Mutebi
Nicholas Kyanda	Sam Ssekiranda
Kirabo Winnie	Scovia Wazemba
Suilaiti Mutebi	Olive Imelda Namuyaba
Martina Nakanwagi	Francis Matovu

**Participating
Healthcare Facilities:**

Bukulula Health Center IV
Kalungu Health Center III
Kyamuliibwa Health Center IV
Kyanamukaaka Health Center IV
Kiwangala Health Center IV
Kabira Health Center III
Kasasa Health Center III
Kinoni Health Center III
Kiyumba Health Center IV

1. EXECUTIVE SUMMARY

This baseline report presents pre-intervention survey data from the Suubi4Stigma study. Suubi4Stigma is a two-year pilot study (2020 – 2022) aimed at addressing HIV/AIDS-associated stigma and its negative impact on adolescent health and psychosocial well-being. The study examines two evidence-informed interventions: 1) group cognitive behavioral therapy (G-CBT) that aims at cognitive restructuring and strengthening coping skills at the individual level, and 2) multiple family group (MFG) that strengthens family relationships intended to address HIV/AIDS-associated stigma at the individual level and within families. A total of 89 adolescents living with HIV (ALHIV) and their caregivers who met the inclusion were enrolled in the study and completed the screening and baseline interviews. Data were collected via a multidimensional survey instrument, which combines existing evidence-based measurement tools, as well as adapted scales and questions developed specifically for ALHIV.

The following are highlights of the key findings from the baseline survey data:

- **Demographic Characteristics.** We captured information on respondents' demographic and household characteristics. Respondents were between 10-14 years (mean age = 12.2 years), 62.9% (n=56) were female, and had lived with their current family for about 8 years. Of the total 89 respondents, 22.5% (n=20) had lost their biological father, and 29.2% (n=26) had lost their biological mother. On average, respondents lived in household with 6 people (range = 12-14) and 3 children under 18 years.
- **Community Background.** Majority of the respondents (74.2%, n=66) lived within walking distance from their school (about 0-2 km), and a health care facility (65.2%, n=58). In addition, respondents reported moderate levels of community satisfaction as measured by items from the Multidimensional Student's Life Satisfaction Scale (mean =29.4, SD =5.5, actual range 14-40).
- **Family Relationships.** Family relationships were measured on several dimensions, including family cohesion, family care and relationships, family communication and perceived child-caregiver support. Respondents reported moderate levels of family cohesion (mean =24.9, SD=6.3, actual range = 12.35), high levels of family care and relationships (mean =24.8, SD = 3.6, actual range = 16-30), and moderate levels of perceived child-caregiver support (mean =55.2, SD=5.9, actual range=43-76). In addition, respondents

reported moderate levels of frequency of discussions with their caregivers on specific topics, including puberty, HIV/AIDS, their education and their future, among others (mean 21.5, SD = 7.9, actual range =11-55), and moderate levels of comfort discussing such topics (mean =25.4, SD = 6.0, actual range 13-44).

- **Social Support.** In addition to family relationships, respondents' quality of friendships was measured using items from the Friendship Qualities Scale. Responses were rated on a 5- point Likert scale, with *1=never and 5= always* (theoretical range = 21-105). The overall mean score was 77.9 (SD=15.1, actual range =23-105) indicating moderate levels of friendship quality. Items rated highly by respondents include feeling safe when accompanied by friends, friends forgiving them easily, friends treating them well, friends correcting their homework mistakes, and friends helping them when they have problems completing homework.
- **Education Parameters.** Respondents were asked about how satisfied they were with their school and their educational plans for completing primary school. Moderate levels of school satisfaction were reported (mean =32.1, SD=4.6, actual range =22-40), as measured by the Multidimensional Students Life Satisfaction Scale (theoretical range = 8-40). Regarding educational plans, 92.2% (n=81) reported planning to start secondary school, and 46.9% (n=38) were "*extremely hopeful*" that they would complete their educational plans.
- **Family Socioeconomic Status.** Respondents were asked several questions to assess their relative level of poverty, including availability of basic needs, food consumption, household assets, and living arrangements. Most respondents (97.8%, n=87) owned at least more than two sets of clothes, 84.3% (n=75) owned a blanket, and 32.6% (n=29) owned at least one pair of shoes. In terms of food consumption, 91% (n=81) of respondents reported having had at least two meals per day in the last week. Most respondents' families owned their own homes (92.1%, n=82), land (87.6%, n=78), and 74.2% (n=66) lived in households with electricity (including solar).
- **HIV Stigma and Shame.** We used multiple measures to assess HIV-related stigma and shame. Respondents reported low levels of HIV-related shame (mean = 2.8, SD=3.0, actual range =0-11), as measured by the Shame Questionnaire (theoretical range = 0-16), low levels of stigma by association (mean = 3.9, SD=4.6, actual range= 0-18), as measured by the Brief Stigma-

by Association Scale (theoretical range = 0-20), moderate levels of overall HIV-related stigma (mean =80.3, SD=19.2, actual range= 48-145) as measured by the HIV Stigma Scale (theoretical range = 40-160), and moderate levels of internalized and anticipated stigma (mean =17.0, SD=5.5, actual range = 9-33).

- **Mental Health Functioning.** Several measures of participant’s mental health wellbeing were utilized. Respondents reported low levels of depressive symptoms (mean =5.0, SD =3.6, actual range = 0-16), as measured by the Child Depression Inventory (theoretical range = 0-28), moderate levels of self-concept (mean =76.0, SD =12.3, actual range = 48-100), as measured by the Tennessee Self-Concept Scale (theoretical range = 20-100), low levels of hopelessness (mean =5.9, SD =3.2, actual range = 0-12), as measured by the Beck Hopelessness Scale (theoretical range = 0-20), moderate levels of post-traumatic stress disorder (mean =30.4, SD= 22.1, actual range = 0-94), measured by the Child Post Traumatic Stress Disorder Reaction Index (theoretical range = 0-124), and moderate levels of loneliness (mean = 13.3, SD = 10.8, actual range = 0-42) measured by the UCLA Loneliness Scale (theoretical range = 0-60).
- **Personal Health.** Respondents were asked several questions regarding their personal health, including overall life and physical health satisfaction and energy levels. Respondents were generally satisfied with their life. About 52.8% (n=47) were “*extremely satisfied*” with their life, 50.6% (n= 45) rated their physical health as “*excellent*”, and 27% (n=24) reported that they “*sometimes*” experienced low energy.
- **Medication Adherence.** We assessed respondents’ adherence to prescribed medication, medication regimen, and availability of medication support. All respondents reported taking daily medication, and almost half (49.4%, n=44) reported taking 2 different medicines a day. About 69.7% (n=62) reported that they had “*never*” missed any medication, and 69.7% (n=62) reported “*always*” taking their medicine as prescribed. In terms of support, 38.2% (n=34) reported being reminded by their mothers and 30.3% (n=27) reported being reminded by their grandparents to take their medication.
- **HIV/AIDS.** We assessed respondents’ HIV status disclosure, HIV transmission and clinical knowledge, as well as prevention attitudes. About 22.5% (n=20) of respondents reported that they “*always*” keep their HIV status a secret from others, including friends and family members, and 65.2%

(n= 58) reported that “none” of their friends knows that they are HIV positive. In terms of HIV knowledge, respondents demonstrated knowledge of the most unsafe and high-risk behaviors, including having unprotected sex (74.2%, n=66) and sharing needles (71.9%, n=64). However, respondents also answered “true” or “unsure” to common myths, such as using birth control protects a woman from HIV and that there is a cure for HIV. Overall, most respondents knew the ABC model of HIV prevention, and they correctly reported critical HIV clinical knowledge, including viral suppression.

- **Access To Medical Care.** Respondents were asked about their ability to access medical care in the past 12 months. Responses were rated on a 5-point scale, with 1 = *Strongly* and 5= *Strongly Disagree* (theoretical range = 6-30). The overall mean score was 14.8 (SD= 6.0, actual range = 6-30), indicating moderate difficulty accessing medical care. Respondents highly rated their inability to access medical care because it was too expensive, and hard to get medical care in emergency situations. Regarding barriers to getting the needed or recommended medical care, 46% (n=41) of respondents reported lack of transportation to medical facility, 41.6% (n=37) reported clinic hours not being inconvenient, and 40.4% (n=36) were unable to pay.
- **Youth Risk Behavior Survey.** Respondents were asked a range of questions related to cigarette smoking, marijuana use, alcohol use, sexual risk behaviors, and peer pressure surrounding these behaviors. Risk behaviors were generally low at baseline. Of the total 89 respondents, none reported that they had tried cigarette smoking or marijuana use. Only 1 respondent had ever had a drink of alcohol. Regarding sexual behaviors, only 1 respondent reported engagement in sexual intercourse. Majority of respondents (96.6%, n=86) reported no pressure at all to have sex. In addition, intentions to engage in sexual risk-taking behaviors were assessed on a 5-point Likert scale (1=*never* and 5=*always*), with a theoretical range between 5-25. The overall mean score was 6.1 (SD = 2.3, actual range 5-16), indicating low intentions to engage in sexual risk-taking behaviors.

Overall, the baseline survey data illustrates how adolescents currently view themselves, their families, their communities and their futures. These baseline data act as benchmarks from which change will be measured, at 3 and 6-months follow-up between the usual care and treatment conditions.

2. SUUBI4STIGMA: INTRODUCTION AND RATIONALE

Globally, an estimated 1.8 million children <15 years are living with HIV [1, 2]. Sub-Saharan Africa (SSA) is heavily burdened by HIV, with 85% of new infections among adolescents happening in the region [2]. Uganda is one of 7 countries in SSA to achieve the 90-90-90 testing, treatment and viral suppression targets [2, 3]. However, even with these improvements, HIV prevalence is still high (7.5%) among people between 15-49 years [4]. Moreover, close to 150,000 children (ages 0-14) were living with HIV in 2019 [2]. While availability and access to free antiretroviral therapy (ART) have decreased child mortality [5], this accomplishment has resulted in the likelihood that more children living with HIV (CLWH) will transition into adulthood with HIV, a chronic, highly stigmatized illness [6]. Unfortunately, the stigma they experience results in a lower quality of life. However, very few stigma-reduction interventions targeting CLWH and their families exist in SSA [7, 8]. Thus, there is a need for data driven research to address stigma, especially among CLWH as they transition through adolescence into young adulthood.

Among people living with HIV (PLWH), stigma is a common experience characterized by public blame and moral condemnation for contracting the infection [9-11]. It perpetuates a culture of silence and fear and prevents individuals from testing and seeking health care [9]. Stigma can be internalized as a result of perceived negative public attitudes. It translates into feelings that the self is reprehensible, damaged and defective; and is associated with depression and post-traumatic stress disorders (PTSD) [12,13], feelings of loneliness and social isolation [14,16], poor treatment and adherence to medication [10, 17], poor HIV-related physical health [18], and increased sexual risk-taking behavior [19]. Moreover, internalized stigma increases in the risk of loss to treatment follow up [20]. Public stigma is manifested by the general population through negative stereotypes such as those related to sexual behaviors, prejudice (fear, aversion, hatred), and discrimination, all of which create social barriers, including access to healthcare [21]. Moreover, many CLWH live with extended family members after losing their parents to HIV, where stigma is perpetuated through rejection, verbal insults, physical abuse, avoidance and ostracism due to unfounded fears of infection [22].

At the family level, family members are often condemned and stigmatized in similar ways, by virtue of their association with an HIV infected family member [23, 24]. Stigma at the family level may be manifested through gossip, name calling, rejection and social isolation, loss of social support, and harassment [23, 24]. Specifically, family members are often held accountable for not preventing

the perceived “immoral behaviors” of the HIV infected family member –leading to feelings of failure, anger, guilt and shame [23]. Such feelings negatively affect family caregiving roles, family functioning, and HIV health outcomes for PLWH, including CLWH. Due to this environment, CLWH may miss developing strong attachment bonds with family members and fail to develop self-esteem, emotional and behavioral regulations [25]. Such unsupportive social environments increase the risk for mental disorders, including depression, stress and anxiety [26]. Therefore, it is critical to develop HIV stigma reduction interventions to improve life satisfaction, family functioning, and reduce the potential spread of HIV.

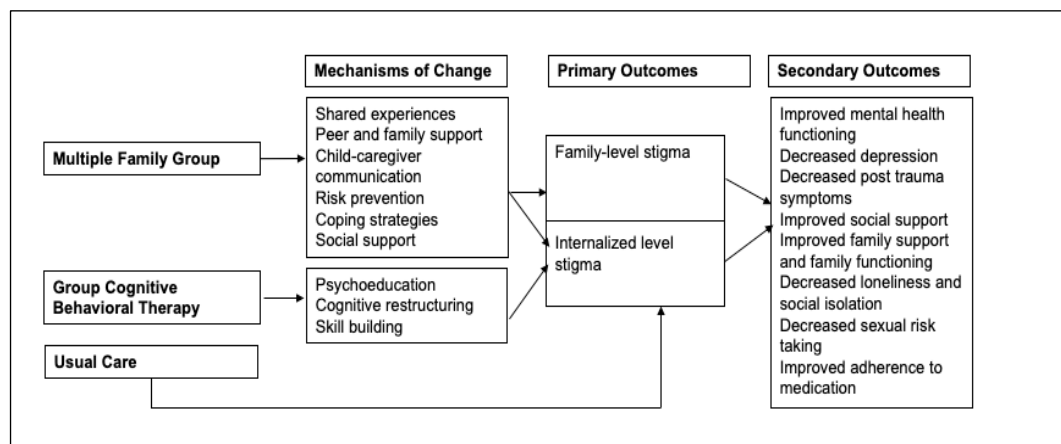
Against this backdrop, this pilot trial, entitled “*Suubi4Stigma*” (also known as *Hope for Stigma* in Luganda local language), seeks to address the urgent need for innovative, theoretically and empirically informed interventions to reduce HIV-associated stigma and its negative impact on adolescent health and psychosocial well-being. This study examines two evidence-based interventions used in mental health settings, schools, and communities: 1) group cognitive behavior therapy (G-CBT) focuses on cognitive restructuring and strengthening coping skills at the individual level; and 2) a multiple family group (MFG) intervention that strengthens family relationships to address stigma among CLWH and their families.

This report is based on baseline data collected between January – April 2021, from 89 dyads adolescents participating in the *Suubi4Stigma* study, a 2-year (2020 – 2022) pilot study funded by the National Institute of Mental Health (NIMH, Grant # R21MH121141).

3. SUUBI4STIGMA: OVERVIEW AND METHODOLOGY

Suubi4Stigma study is informed by the HIV stigma framework [27, 28] suggesting that HIV stigma impacts PLWH via distinct HIV stigma mechanisms of internalized, anticipated, and enacted HIV stigma. Anticipated and enacted HIV stigma involve experiences with others [29]. Internalized stigma –the focus of this study, involves endorsing negative feelings and beliefs associated with HIV and applying them to the self. In addition, family members of PLWH are also subjected to and experience stigma by association via similar mechanisms. Within this framework, MFG provides opportunities for caregivers and children to communicate in a safe setting. It focuses on addressing internalized and family-level stigma by normalizing shared experiences with other families, fostering peer support and family communication, facilitating optimism and morale, and enhancing interpersonal and coping skills [30]. On the other hand, G-CBT addresses internalized stigma through the core components of psychoeducation, cognitive restructuring, and skill-building to increase adaptive coping mechanisms [31]. These mechanisms may impact a range of psychological, behavioral, and health outcomes for ALWH and their families (Figure 3.1).

Figure 3.1 Suubi4Stigma Conceptual Model



The Suubi4Stigma study was therefore designed to pilot test the feasibility and acceptability and preliminary impact of two evidence-based interventions to reduce HIV-associated stigma and its negative impact on adolescent health and psychosocial well-being. The specific aims of the study are:

1. Pilot test the feasibility, acceptability, and preliminary impact of G-CBT and MFG on reducing HIV-associated (internalized and family level) stigma, and its impact on adolescent and family outcomes (trauma symptoms, depression,

sexual risk, family/social support and adherence to medication) compared to: 1a) Usual care vs G-CBT; b) Usual care vs MFG; c) G-CBT vs. MFG.

2. Qualitatively examine participants' and facilitators' intervention experiences and identify individual, family and institutional-level facilitators and barriers to G-CBT and MFG intervention implementation and participation.

Sample and Setting

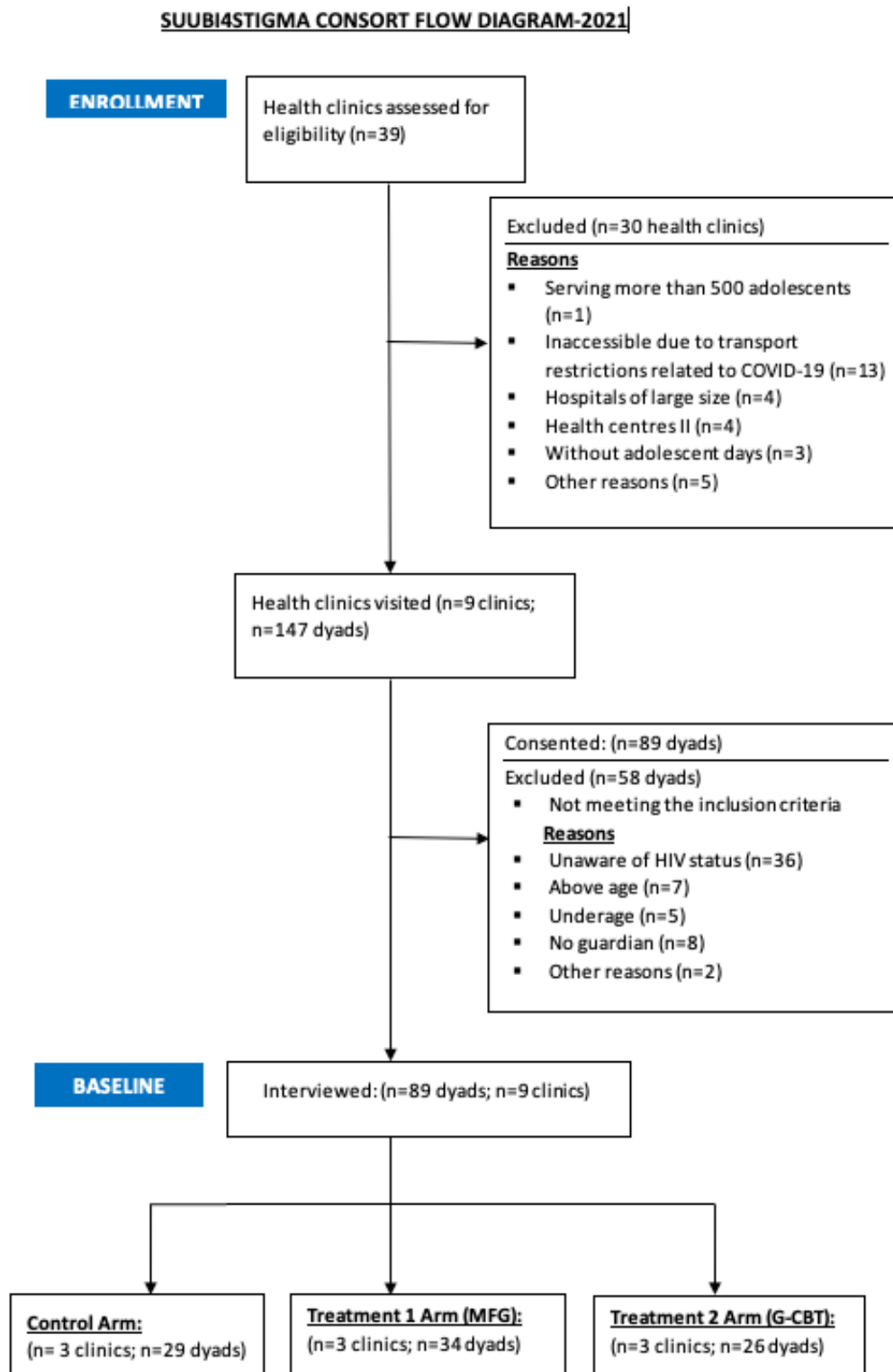
A total of 89 adolescents and their caregivers (dyads) enrolled in care at a health clinic that has partnered with ICHAD and RTY were recruited into the study. Adolescents were eligible to participate if they were: 1) living with HIV and know their status, 2) prescribed ART, 3) living within a family (defined broadly, not necessarily with biological parents), and 4) between 10 to 14 years. All eligible adolescents from a particular household were enrolled in the study and assigned to the same study condition. In addition, caregivers of children who agreed to participate in the study were enrolled.

The study is implemented in the greater Masaka region of Uganda. The region is composed of seven political districts: Rakai, Masaka, Lwengo, Kalungu, Lyantonde, Kyotera and Bukomansimbi, and has the highest HIV prevalence compared to the national average [3,4]. For a health clinic to be included in the study, it had to be accredited by the Uganda Ministry of Health to provide ART and have adolescent friendly services (e.g., adolescent days).

Recruitment and Selection

Recruitment procedures tested in our Suubi+Adherence study were utilized [31]. Participants were identified and recruited from HIV health clinics associated with the research team in the study region. At HIV clinics, patients are seen at least annually and each patient on ART must have prescriptions filled at least monthly at each clinic. A clinic staff created a list of all eligible families from medical records, noting their eligibility to participate. Next, the clinic staff presented the project idea to adult caregivers of eligible children during appointments. If caregivers were interested, verbal consent to be contacted by research staff who was on site during the adolescent clinic days was requested. After speaking with the research staff one-on-one about the study, interested caregivers were taken through informed consent after which they provide written consent for themselves and for their child to participate. Children were asked to provide written assent separately to avoid coercion. Details on recruitment, consent and enrollment are shown in Figure 3.2.

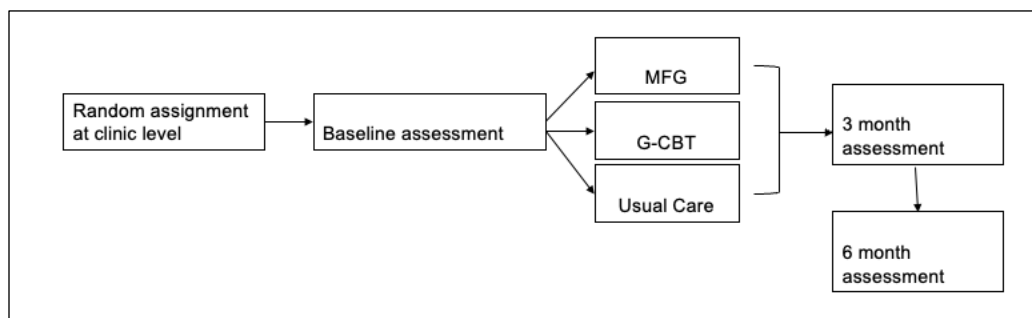
Figure 3.2 Suubi4Stigma Baseline Consort Flow Diagram



Study Design and Intervention Description

The Suubi4Stigma study is a three-arm cluster RCT evaluating the feasibility, acceptability, and preliminary impact of G-CBT versus MFG interventions among, 90 CLWH (10-14 years) and their caregivers (dyads). Nine clinics will be randomized to one of three study arms (n= 3 clinics, 30 child-caregiver dyads each): 1) Usual care; 2) G-CBT + Usual care; and 3) MFG + Usual care. Both treatment and control arms will be delivered over a 3-month period. Data will be collected at baseline (pre-intervention), 3 months and 6 months post-intervention initiation (Figure 3.3).

Figure 3.3 Suubi4Stigma Study Design



Control Arm (Usual Care)

All participants in both control and treatment arms received the traditional clinic intervention focused on testing services, as well as medical and treatment support for PLWH, including children and adolescents [32]. Currently, patients coming to the clinics receive testing and ART treatment as well as information about disease management. Both children and caregivers receive this information. All participants in both control and treatment arms receive medical and psychosocial support as part of usual care.

Treatment Arm1 (G-CBT)

In addition to usual care, participants in this arm received 10 sessions of G-CBT for HIV-associated stigma. Within G-CBT for stigma, we utilize core components of CBT, such as psychoeducation, cognitive restructuring and skill-building to increase adaptive coping mechanisms [30]: 1) exploration of HIV's role and impact of stigma in adolescents' lives; 2) use of cognitive restructuring to identify and address the negative stigma-associated beliefs, loss of self-esteem, and self-blame; and 3) skills-building around stress management and emotion-focused coping strategies to address negative feelings (e.g. assertiveness, relaxation skills and problem solving skills) [33]. G-CBT is facilitated by trained para-counselors with experience in mental health support and working with children and

adolescents living with HIV in the study region. Caregivers do not participate in G-CBT. Sessions are delivered twice a week, outside of school hours in the Luganda local language. G-CBT is likely to offer more opportunities for normalization, positive peer modeling, reinforcements, social support, and exposure to social situations and feedback sources, given the context of shared experiences [34].

The curriculum consists of the following sessions:

1. Introduction to Suubi4Stigma G-CBT Program
2. HIV/AIDS-associated stigma and depression
3. Relationship between thoughts and emotions
4. Identifying thought patterns
5. Challenging negative thoughts
6. Identifying and increasing helpful thoughts
7. Setting goals and shaping your reality
8. Visualization and guided imagery techniques for mood management
9. Change talk to improve mood and reduce depressive symptoms
10. Group review and ending celebrations

Treatment Arm 2 (MFG)

The MFG intervention (also known as “Happy Families” or “Amaka Amasanyufu in the local Luganda language) is rooted in family systems theory, structural family theory and social learning theory with elements of psychoeducation and social group work. MFG is a family-centered, group-delivered, evidence-informed, strength-based 10-session intervention for adolescents whose families struggle with poverty and associated stressors [29]. MFG integrates components of existing evidence-based practices that successfully improve parental management, mental health promoting family processes, and family strengthening [35, 36]. Specific session content drew on the current interventions implemented by ICHAD [31, 37, 38]. Sessions focused on the core components of MFG, also known as 4Rs and 2S’s (rules, responsibility, relationships, respectful communication, stress and social support). Families (children and caregivers) are combined into groups of no more than 10 families each to promote communication and support within and among families. Sessions are delivered in the Luganda local language, lasting approximately 1 hour and are delivered twice a week, outside of school hours. Given the significant and protective role families play in children and adolescents’ health and mental health, we expected that strengthening family functioning and

dialogue by involving caregivers through MFG would lead to better child outcomes, including addressing HIV-associated stigma.

The curriculum consists of the following session:

1. Introduction to “Amaka Amasanyufu”
2. HIV/AIDS Knowledge and Adherence to Medication
3. Stigma, Discrimination and Associated Risks
4. Building on Family Supports
5. Rules for Home and Problem Solving for Broken Rules
6. Respectful Communication
7. Responsibility at Home
8. Dealing with Stress at Home
9. Family Relationships and Building Families Up
10. Group Review and Ending Celebrations

Data Collection

The Suubi4Stigma study has three assessment points: baseline, 3, and 6-months post intervention initiation. This report is based on baseline data (pre-intervention). Data was collected using a 90-minute instrument administered by trained Uganda interviewers. The measures used were adapted, tested and or refined in our other Suubi studies in the study region [31, 39-43]. Participants were assessed on a range of topics, including the following: family and community background, family relationships, social support, family socioeconomic status, HIV/AIDS knowledge, HIV stigma and shame, HIV/AIDS knowledge and prevention attitudes, personal health, mental health, access to health care and risk-taking behaviors. In the following sections, we provide participants’ responses for each of these sections.

4. DEMOGRAPHIC CHARACTERISTICS

Table 4.1 shows the demographic characteristics of respondents who completed baseline interviews (N=89). Respondents were between 10-14 years of age (mean age = 12.2 years), and 62.9% (n=56) were female. Of the total respondents, 69.7% (n=62) self-identified as Catholic and 14.6% (n=13) self-identified as Muslim. About 48.3% (n=43) reported living with their grandparent(s) and 47.2% (n=42) reported living with their biological mother *most* or *all the time*.

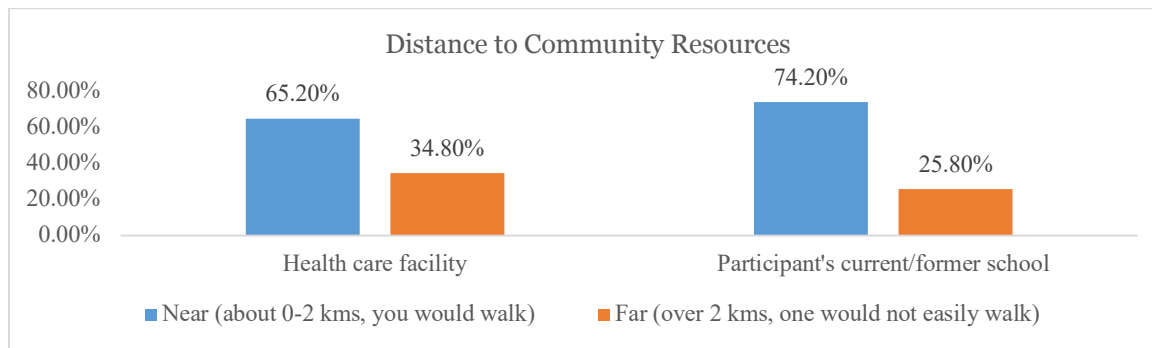
Table 4.1. Demographic Characteristics (N=89)

Variable	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
Gender (%)	37.1	62.9	100
Age			
10	7 (21.2)	7 (12.5)	14 (15.7)
11	6 (18.2)	12 (21.4)	18 (20.2)
12	5 (15.2)	7 (12.5)	12 (13.5)
13	8 (24.2)	17 (30.4)	25 (28.1)
14	7 (21.2)	13 (23.2)	20 (22.5)
Religion			
Catholic	19 (57.6)	43 (76.8)	62 (69.7)
Protestant	7 (21.2)	3 (5.4)	10 (11.2)
Muslim	6 (18.2)	7 (12.5)	13 (14.6)
Born-again/saved Christian	1 (3.0)	3 (5.4)	4 (4.5)
Adults you live with <i>all</i> or <i>most of the time</i>			
Mother	15 (45.5)	27 (48.2)	42 (47.2)
Father	9 (27.3)	20 (35.7)	29 (32.6)
Grandparents	17 (51.5)	26 (46.4)	43 (48.3)
Other relatives (e.g., aunt, uncle, in-laws, etc.)	18 (54.6)	25 (44.6)	43 (48.3)

5. COMMUNITY BACKGROUND

Respondents were asked questions about their current or former school and health care facilities, how far away these facilities were from their homes, and how they felt about their communities. Distance was assessed by asking respondents to choose between two different options: *near* (about 0-2 km, one could walk), or *far* (over 2 km, one could not easily walk). As presented in Figure 5.1 below, most respondents (74.2%, n=66) lived *near* their school within walking distance and 65.2% (n=58) lived *near* a health care facility.

Figure 5.1. Distance to Community Resources (N=89)



Community Satisfaction

Respondents' community satisfaction was assessed using 8 items adapted from the Multidimensional Student's Life Satisfaction Scale (MSLSS) [44] and has been tested in our Suubi studies [31, 39-43]. The MSLSS provides a multidimensional profile of children's life satisfaction judgments with important specific domains, including school, family and friends in their lives; and assess their general overall life satisfaction. Respondents were asked to rate how satisfied they were with their community, on a 5-point Likert scale with the following response options: 1= *never*, 2= *sometimes*, 3 = *about half of the time*, 4= *most of the time*, and 5= *always*. The theoretical range of this scale is 8-40 with higher scores indicating greater levels of community satisfaction. Three items were reverse coded to create summated scores. Table 5.1 presents the mean scores and standard deviations for each item and the overall mean score of the community satisfaction scale. For individual response data for this scale see Appendix Table A.1.

Table 5.1. Community Satisfaction (N=89)

Statement	Mean (SD)
I like where I live.	3.7 (1.3)
I wish I lived in a different house. *	4.2 (1.3)
I wish I lived in another town or village. *	4.0 (1.2)
I like my village.	3.5 (1.4)
I like my neighbors	3.4 (1.2)
This town or village is filled with not nice people. *	4.0 (1.3)
My family's house is nice.	3.4 (1.4)
There are a lot of fun things to do where I live.	3.1 (1.3)
Total Mean Score	29.4 (5.5)
Range	14-40

*Item has been reverse-coded so that higher scores reflect higher community satisfaction

The overall score was 29.4 (SD =5.5, range 14-40), indicating moderate levels of community satisfaction. Respondents were less likely to wish that “they lived in a different house” (mean = 4.2, SD=1.3), “lived in another town or village” (mean = 4.0, SD=1.2) and were less likely to report that their “towns or villages were filled with not nice people” (mean = 4.0, SD=1.3) (all items were reverse coded). Respondents were also less likely to report having fun things to do in their villages or towns (mean = 3.1, SD=1.3).

6. FAMILY BACKGROUND

Respondents were asked several questions about their current household, including length of stay with their current family, the total number of people in the household (adults and children), number of children of school-going age who attend school and those who do not, including the reasons for not attending school.

At baseline, participants had lived with their current family between less than a year to 14 years. The average total number of people per household was 6.2 people (range = 2-14) and 3 children (range = 0-9) under 18 years. The majority of respondents (96.2%) reported that children of school-going age attended school. For those who did not attend school, reasons for non-attendance included financial constraints (no money to pay for school fees and scholastic materials), failure to pass exams, did not like school, had to work, had to take care of other family members and some did not know why.

Family of Origin

In addition to family background, respondents were asked to provide information on their families of origin, i.e., information about their biological parents. Given that the study focuses on adolescents living with HIV, it was critical to assess the proportion of participants who are orphans i.e., had lost a biological father or mother, or both, as well as siblings. Of the total respondents, 22.5% (n=20) had lost their biological father, and 29.2% (n=26) had lost their biological mother. In addition, 39.3% (n=39) of respondents had lost at least one or more siblings

7. FAMILY RELATIONS

All items measuring family relations were adapted from the Family Environment Scale (FES) [45] and Family Assessment Measure (FAM) [46] and have been tested in our Suubi studies [31, 39-43]. Family relationships were measured on a number of dimensions: 1) family cohesion, 2) family communication assessed by frequency of conversation with a caregiver on specific topics and level of comfort discussing specific topics with a caregiver, 3) perceived child caregiver support, and 5) willingness to talk.

Family Cohesion

Family cohesion was measured using 7 items that assess the degree of commitment, help, and support that family members provide for one another. Respondents were asked to rate how often each item occurred in their family, on a 5-point Likert scale, with *1=never*, *2=sometimes*, *3=about half of the time*, *4=most of the time*, and *5=always*. The theoretical range for this scale is 7-35, with high-summed scores indicate high levels of family cohesion (Cronbach alpha =0.798). Mean scores for this scale are presented in Table 7.1 below. Individual response data can be found in Table A.2 of the Appendix. The overall mean score was 24.9 (SD =6.3, actual range = 12.35) indicating moderate levels of family cohesion. Favorable ratings were reported on items related to doing things together as a family (mean = 3.6, SD=1.2) and feeling loved by family members (mean = 4.0, SD=1.1).

Table 7.1. Family Cohesion Scale (N=89)

Statement	Mean (SD)
Do your family members ask each other for help before asking nonfamily members for help	3.4 (1.4)
Do your family members like to spend free time with each other	3.3 (1.3)
Do your family members feel close to each other	3.4 (1.4)
Are you available when others in the family want to talk to you?	3.4 (1.4)
Do you listen to what other family members have to say, even when you disagree	3.3 (1.4)
Do you do things together as a family	3.6 (1.2)
Do you think that your family members love you	4.0 (1.1)
Total Mean Score	24.9 (6.3)
Range	12-35

Family Care and Relationships

Family care was measured using 6 items related to things that parents/caregivers sometimes do with their children [47]. Respondents were asked to rate how often each item occurred in their family, on a 5-point Likert scale, with 1=*never*, 2=*sometimes*, 3=*about half of the time*, 4=*most of the time*, and 5=*always*. The theoretical range for this scale is 6-30, with high scores indicating higher levels of family care and relationships. Four items in the inverse direction were reverse coded to create summated scores (Cronbach alpha = 0.53). Table 7.2 presents the mean scores and standard deviations for each item, and the overall mean score. Individual response data are presented in Table A.3 of the Appendix.

Table 7.2. Family Care and Relationships (N=89)

Statement	Mean (SD)
Do your parent(s)/guardian(s) take time to listen to you when you want to talk to them	3.7 (1.2)
If you have a problem, how often do your parent(s)/guardian(s) offer to help	3.8 (1.2)
Over the past 3 months, how often have you gone without enough food to eat*	4.4 (1.1)
Over the past 3 months, how often have you gone without enough clean water*	4.5 (1.0)
Over the past 3 months, how often have you gone without medicine when you are sick*	4.6 (1.0)
Over the past 3 months, how often have you gone without school expenses for example: fees, uniforms or books? *	4.0 (1.3)
Total Mean Score	24.8 (3.6)
Range	16-30

*Item has been reverse-coded so that higher scores reflect higher levels of family care and relationships

The overall mean score was 24.8 (SD = 3.6, actual range = 16-30) indicating high levels of family care and relationships at baseline. High scores were reported on items related to availability of basic needs, i.e., respondents were less likely to report going without enough food to eat (mean = 4.4, SD =1.1), enough clean water (mean = 4.5, SD =1.0), medicine (mean = 4.6, SD=1.0), or scholastic materials (mean = 4.0, SD =1.3).

Family Communication

Items measuring family communication were adapted from Krauss's interview [48]. Two dimensions of family communication were measured: 1) frequency of conversation with caregiver about certain topics, such as puberty, HIV/AIDS, having sex, education, and future plans, among others; and 2) level of comfort discussing these topics with caregiver.

Frequency of Discussions with Caregiver on Specific Topics

Respondents were asked to indicate how often they discussed 11 specific topics with their caregiver. Responses were rated on a 5-point Likert scale, with 1=*never*, 2=*sometimes*, 3=*about half of the time*, 4=*most of the time*, and 5=*always*. The theoretical range for this scale is 11-55, with higher scores indicating high communication frequency levels (Cronbach Alpha = 0.80). The mean scores for each item are presented in Table 7.3. Individual response data is presented in Table A.4 of the Appendix.

Table 7.3. Frequency of Discussions with Caregivers (N=89)

Topic	Mean (SD)
Alcohol/Drinking	1.5 (1.1)
Cigarette Smoking	1.4 (1.0)
HIV or AIDS	2.8 (1.4)
Sexually transmitted diseases (STDs)	1.6 (1.2)
Having sex	1.5 (1.1)
Bad friends	1.6 (1.1)
Your education	3.3 (1.3)
Puberty	2.1 (1.4)
What you will do to earn a living in the future	2.9 (1.6)
How to avoid getting pregnant or getting other people pregnant	1.7 (1.3)
Marriage	1.3 (0.9)
Total Mean Score	21.5 (7.9)
Range	11-51

The overall mean score was 21.5 (SD = 7.9, actual range =11-55), indicating moderate levels of discussions with the caregiver. Respondents rated highly having discussions about HIV/AIDS (mean = 2.8, SD=1.4), their education (mean = 3.3.) and their future (mean = 2.9, SD=1.6). Cigarette smoking (mean = 1.4, SD=1.0), alcohol use (mean = 1.5, SD=1.1) and marriage (mean = 1.3, SD=0.9) were the least topics discussed with caregivers.

Level of Comfort Discussing Specific Topics with Caregivers

Respondents were also asked to rate how comfortable they felt talking to their caregivers about the above specific topics. Responses were rated on a 4-point scale, with *1=very uncomfortable*, *2=somewhat uncomfortable*, *3=somewhat comfortable*, and *4=very comfortable*. The theoretical range for this scale is 11-44, with high-summed scores indicating high comfort levels of discussing with caregivers (Cronbach's $\alpha = 0.78$). Table 7.4 presents the mean scores for each item. Individual response data is presented in Table A.5 of the Appendix.

The overall mean score was 25.4 (SD = 6.0, actual range 13-44), indicating moderate comfort levels. Consistent with frequency of conversation, respondents felt more comfortable discussing topics related to HIV/AIDS, education and future planning– topics more frequently discussed with caregivers. On the other hand, respondents felt less comfortable discussing topics related to substance use (alcohol use and cigarette smoking), having sex, and STDs.

Table 7.4. Level of Comfort Discussing Specific Topics (N=89)

Topic	Mean (SD)
Alcohol/Drinking	1.8 (1.0)
Cigarette Smoking	1.7 (0.9)
HIV or AIDS	2.6 (1.1)
Having sex	1.8 (0.9)
Sexually transmitted diseases (STDs)	1.9 (1.1)
Bad friends	2.1 (1.1)
Your education	3.8 (0.4)
Puberty	2.5 (1.1)
What you will do to earn a living in the future	3.4 (0.8)
How to avoid getting pregnant or getting other people pregnant	2.0 (1.1)
Marriage	2.1 (1.1)
Total Mean Score	25.4 (6.0)
Range	13-44

Perceived Child-Caregiver Support

Items measuring perceived child-caregiver support were adapted from Social Support Behaviors Scale (SS-B) scale [49] and were tested in our Suubi studies [31, 39-43]. Respondents were asked to rate the adults they live with, on a 17-item scale. Responses were rated on a 5-point Likert scale, with *1= never*, *2 = sometimes*, *3=about half of the time*, *4=most of the time*, and *5= always*. Items in

the inverse direction were reverse coded to create summated scores. The theoretical range for this scale is 17-85, with high-summated scores indicating high levels of perceived support from caregivers (Cronbach alpha =0.85). Table 7.5 presents the mean scores and standard deviations for each item, and the overall mean score of the scale. Individual response data is presented in Table A.6 of the Appendix.

Table 7.5. Perceived Child-Caregiver Support (N=89)

Statement	Mean (SD)
Can you count on your current parent(s)/ guardian(s) to help you out, if you have a problem	3.8 (1.2)
Do your current parent(s)/guardian(s) say that you shouldn't argue with adults*	2.9 (1.5)
Do your current parent(s)/guardian(s) keep challenging you to do your best in whatever you do	3.7 (1.3)
Do your current parent(s)/guardian(s) say that you should give in on arguments rather than make people angry*	3.1 (1.5)
Do your current parent(s)/guardian(s) keep challenging you to think independently	2.0 (1.4)
Do your current parent(s)/guardian(s) show interest in your work (whatever you do)	3.4 (1.3)
Do your current parent(s)/guardian(s) show interest in your homework (for children who are in school)	3.4 (1.3)
Do your current parent(s)/guardian(s) tell you that their ideas are correct and that you should not question them*	3.5 (1.4)
When your current parent(s)/guardian(s) wants you to do something, do they explain why	2.7 (1.5)
Whenever you argue with your current parent(s)/guardian(s), do they say things like, "You'll know better when you grow up"*	3.3 (1.5)
Do your current parent(s)/guardian(s) let you make your own plans for things you want to do	2.6 (1.5)
Do your current parent(s)/guardian(s) know who your friends are	3.1 (1.4)
Do your current parent(s)/guardian(s) act cold and unfriendly if you do something they don't like*	3.1 (1.5)
Do your current parent(s)/guardian(s) spend time just talking with you	3.3 (1.4)
When you make a mistake, do your current parent(s)/guardian(s) make you feel bad about it*	3.8 (1.5)
Do your current parent(s)/guardian(s) do things for fun together as a family	3.4 (1.4)
Do your current parent(s)/guardian(s) stop you from doing things with them when you do something they don't like? *	4.1(1.4)
Total Mean Score	55.2 (5.9)
Range	43-76

*Item has been reverse-coded so that higher scores reflect higher perceived child-caregiver support

The overall mean score was 55.2 (SD=5.9, actual range=43-76) indicating moderate levels of perceived child-caregiver support among respondents at baseline. Respondents ranked highly items related to warmth and acceptance, such as counting on a caregiver's help in case of a problem (mean =3.8, SD= 1.2), challenging the child to always do the best (mean =3.7, SD=1.3), caregiver not making a child feel bad for making a mistake (mean = 3.8, SD= 1.5), and not stopping doing things with the child if they do someone unacceptable (mean = 4.1, SD= 1.4). On the other hand, respondents ranked lower items related to psychological autonomy, such as challenging the child to think independently (mean = 2.0, SD= 1.4), and letting the child make their own plans for things they want to do (mean = 2.6, SD= 1.50).

Willingness to Talk

Respondents were asked to indicate who they would go to first if they needed advice. A total of 46.1% (n=41) of respondents reported that they would get advice from their mother and 25.8% (n=23) would get advice from their grandmothers. Respondents were then asked whether they would talk to someone if they were faced with a specific problem and the results are presented in Table 7.6 below.

More than half of respondents (66.3%, n=59) indicated that they would not talk to anyone if a boy or girl wanted to be their romantic boyfriend/girlfriend, 34.8% (n=31) would seek help if their friend wanted them to try alcohol or drugs, 96.6% (n=86) have someone who helps them when they have a problem, 79.8% (n=71) have someone who makes them feel better when they are sad, 87.6% (n=78) have someone to play with or spend time with when they feel lonely, 60.7% (n=54) have someone who loves them even when they do things that they don't like, and 80.9% (n=72) have someone to talk to when they have questions about their HIV status.

Table 7.6. Willingness to Talk (N=89)

Statement	Male (n=33) n(%)	Female (n=56) n(%)	Total (N=89) n(%)
Would you talk to someone if a boy/girl wanted to be your romantic boyfriend/girlfriend?	9 (27.3)	21 (37.5)	30 (33.7)
Would you seek help if your friends wanted to try alcohol or drugs?	15 (45.5)	16 (28.6)	31 (34.8)
Do you have someone who helps you when you have a problem?	32 (97.0)	54 (96.4)	86 (96.6)

Do you have someone who makes you feel better when you are sad?	29 (87.9)	42 (75.0)	71 (79.8)
Do you have someone to play with or spend time with when you feel lonely	27 (81.8)	51 (91.1)	78 (87.6)
Do you have someone who loves you when you do things that they don't like?	15 (45.5)	39 (69.6)	54 (60.7)
Do you have someone to talk to when you have questions about your HIV?	29 (87.9)	43 (76.8)	72 (80.9)

8. SOCIAL SUPPORT

Friendship Quality

Respondents' quality of friendships was measured using 21-items adapted from the Friendship Qualities Scale [50, 51]. This multidimensional measurement scale assesses the quality of children's relationships with their best friends via several aspects, including closeness, help, safety and closeness. Respondents were asked to rate how each statement applied to them. Responses were rated on a 5- point Likert scale, with *1=never*, *2=sometimes*, *3=about half of the time*, *4=most of the time*, and *5= always*. The theoretical range for this scale is 21-105, with high scores indicating high quality friendship levels (Cronbach's alpha = 0.86). Items in the inverse direction were reverse coded to generate summated scores. Table 8.1 presents the mean scores and standard deviations for each item, the overall mean score of each subscale, and the grand mean for the entire scale. Individual response data are presented in Table A.7 of the Appendix.

Table 8.1. Friendship Qualities Scale (N=89)

Statement	Mean (SD)
Safety Subscale	
I believe all the information given by my friends.	3.4 (1.5)
My friends never break a promise.	2.9 (1.6)
I am confident that my friends will not leak my secret.	3.4 (1.6)
My friends never lie to me.	2.9 (1.6)
I always listen to my friends' advice	3.7 (1.4)
I feel safe when the precious belongings are kept by my friends.	3.2 (1.6)
I inform my friends immediately he or she encounters problems in school	3.9 (1.3)
I feel safe when accompanied by my friends.	4.0 (1.4)
Mean score	27.4 (6.9)
Range	8-40

Closeness Subscale

I always joke with my friends.	3.9 (1.4)
I understand my friends' mood.	3.5 (1.5)
I always chat with my friends even if we are from different classes.	4.1 (1.2)
My friends and I always share our life experience.	3.8 (1.5)
I understand the background of my friends.	3.5 (1.6)
I would not feel shy when performing something humorous in front of my friends.	3.9 (1.4)
<i>Mean score</i>	22.6 (5.4)
<i>Range</i>	6-30

Acceptance Subscale

My friends forgive me easily.	4.0 (1.3)
My friends and I can overcome differences in our opinion immediately.	3.7 (1.4)
My friends treat me well.	4.1 (1.2)
My relationships with my friends are like brothers and sisters.	4.1 (1.2)
<i>Mean score</i>	16.0 (3.8)
<i>Range</i>	4-20

Help Subscale

My friends correct my mistakes in my homework.	4.0 (1.3)
My friends always help me when I have problems in completing my homework.	4.3 (1.1)
My friends help me to solve problems.	3.9 (1.3)
<i>Mean score</i>	12.0 (3.3)
<i>Range</i>	2-15

Grand Mean

77.9

Range23-105

The overall mean score was 77.9 (SD=15.1, actual range =23-105) indicating moderate levels of friendship quality. Within the safety subscale, feeling safe when accompanied by friends was rated highly by respondents (mean = 4.0, SD= 1.4); as well as always chatting with friends even from different classes (mean = 4.1, SD = 1.2), within the closeness scale. Within the acceptance subscale, respondents rated highly items related to friends forgiving them easily (mean = 4.0, SD= 1.3), friends treating them well (mean = 4.1 SD = 1.2) and having friendships like that of siblings (mean = 4.1, SD= 1.2). Finally, friends correcting their homework mistakes (mean = 4.0, SD= 1.3) and friends helping them when they have problems completing homework (mean =4.3, SD= 1.1.) were both rated highly within the help subscale.

9. EDUCATIONAL PARAMETERS¹

School Satisfaction Scale

School satisfaction was assessed using 8-items adapted from the Multidimensional Students Life Satisfaction Scale (MSLSS) [44] and tested in our other Suubi studies [31, 39-43]. Respondents were asked to rate 8 items on a 5-point scale, with *1=never*, *2=sometimes*, *3=about half of the time*, *4=most of the time*, and *5= always*. Items in the inverse direction were reverse coded to create summated scores. High scores indicate high levels of school satisfaction. The theoretical range for this scale is 8-40 (Cronbach's alpha 0.59). As presented in Table 9.1, the overall mean score was 32.1 (SD=4.6, range =22-40) indicating moderate levels of school satisfaction. Individual response data is presented in Table A.8 of the Appendix.

Table 9.1. School Satisfaction Scale (N=86)

Statement	Mean (SD)
I look forward to going to school each day	4.1 (1.0)
I like being in school	4.0 (1.1)
School is interesting	3.8 (1.2)
I wish I didn't have to go to school*	4.3 (1.2)
There are many things about school I don't like*	4.2 (1.1)
I enjoy school activities	3.3 (1.3)
I learn a lot at school	3.7 (1.2)
I feel bad at school*	4.6 (1.0)
Total Mean Score	32.1 (4.6)
Range	22-40

* Item has been reverse-coded so that higher scores reflect greater school life satisfaction

Pediatric Quality of Life Inventory

Wellbeing at school was assessed using four items adapted from the Pediatric Quality of Life Inventory (PEDSQL) [52]. The original instrument has 23 items and is used to measure health related quality-of-life in children and adolescents. Items were rated on a 5-point Likert scale, with *1=never*, *2=sometimes*, *3=about half the time*, *4=most of the time* and *5= always*. All items were reverse coded to create summated scores. Table 9.2 below shows that the overall mean score was

¹ In this section, we report results from respondents enrolled in school at the time of baseline interviews (N=86).

15.4 (SD =3.4, range = 4-20) indicating moderate levels of pediatric quality of life. Individual response data is presented in Table A.9 of the Appendix.

Table 9.2 Pediatric Quality of Life Inventory (N= 86)

Statement	Mean (SD)
It is hard for me to pay attention in class*	3.9 (1.5)
I am forgetful*	4.2 (1.1)
I miss school because of not feeling well*	4.0 (1.2)
I miss school to go to the doctor, clinics or hospital*	3.4 (1.3)
Total Mean Score	15.4 (3.4)
Range	4-20

* Item has been reverse-coded so that higher scores reflect greater Pediatric Quality of life.

School Related Questions

In addition to school satisfaction, respondents were asked several questions related to their experiences in school, including school accessibility and living arrangements (i.e., whether they lived in boarding sections), behavioral issues while attending school, school-related challenges and goals. Of the total sample, 48.8% (n=42) reported that they had repeated a class and 85.7%(n=36) had repeated a class at least once. Only 4 respondents were enrolled in the boarding section. Most the respondents in the day section (86.5%, n=77) walked to school.

To assess school-related behavioral issues, respondents were asked about verbal and physical altercation incidences with other students and teachers, as well as suspensions and expulsions during the last school term. Of the total sample, 12.8% (n=11) had engaged in a serious physical fight, and 23.3% (n=20) had ever had serious verbal fights (arguments) with other children in school in the previous school term. Only 1 respondent reported a physical fight with a teacher. None of the respondents had ever been suspended or expelled from school. Only 1 participant had thought of dropping out of school due to disturbance from other pupils.

School Absenteeism

Respondents were asked several items related to how often they missed school in the last month. Responses were rated on a scale of 0 (*never missed school*) to 10+ (*miss school very often*). The results are presented in Table 9.3. Half of the respondents (51.2%, n=44) reported difficulty getting to school at least once or more times a month, and over one third (38.4%, n=33) had missed school in the last month. About 69.8% (n= 60) of the respondents had missed school at least

once in the previous month for reasons related to illness, and 46.5% (n=40) had missed school due to lack of school fees.

Table 9.3 School Absenteeism (N=86)

Statement	Male (n=32) n(%)	Female (n=54) n(%)	Total (N=86) n(%)
It can be difficult to get to school every day, even when you are trying your hardest?			
0 (never missed)	13 (40.6)	29 (53.7)	42 (48.8)
½	1 (3.1)	4 (7.4)	5 (5.8)
1	9 (28.1)	9 (16.7)	18 (20.9)
2	3 (9.4)	0 (0.0)	3 (3.5)
3	1 (3.1)	2 (3.7)	3 (3.5)
4	0 (0.0)	1 (1.9)	1 (1.2)
5	1 (3.1)	4 (7.4)	5 (5.8)
6	0 (0.0)	2 (3.7)	2 (2.3)
7	1 (3.1)	1 (1.9)	2 (2.3)
10	3 (9.4)	1 (1.9)	4 (4.7)
10+ (miss school very often)	0 (0.0)	1 (1.9)	1 (1.2)
Number of days missed school in the last four weeks?			
0	13 (40.6)	20 (37)	33 (38.4)
½	4 (12.5)	1 (1.9)	5 (5.8)
1	4 (12.5)	12 (22.2)	16 (18.6)
2	3 (9.4)	7 (13.0)	10 (11.6)
3	4 (12.5)	2 (3.7)	6 (7.0)
4	0 (0.0)	5 (9.3)	5 (5.8)
5	1 (3.1)	4 (7.4)	5 (5.8)
6	1 (3.1)	0 (0.0)	1 (1.2)
10+	2 (6.3)	3 (5.6)	5 (5.8)
In a month, how many days do you miss school due to illness?			
0	10 (31.3)	16 (29.6)	26 (30.2)
½	2 (6.3)	1 (1.9)	3 (3.5)
1	7 (21.9)	7 (13)	14 (16.3)
2	4 (12.5)	9 (16.7)	13 (15.1)
3	3 (9.4)	10 (18.5)	13 (15.1)
4	1 (3.1)	2 (3.7)	3 (3.5)
5	1 (3.1)	4 (7.4)	5 (5.8)
6	0 (0.0)	2 (3.7)	2 (2.3)
7	1 (3.1)	0 (0.0)	1 (1.2)

8	1 (3.1)	0 (0.0)	1 (1.2)
10	1 (3.1)	3 (5.6)	4 (4.7)
10+	1 (3.1)	0 (0.0)	1 (1.2)

In a month, how many days do you miss school due to lack of school fees?

0	17 (53.1)	29 (53.7)	46 (53.5)
½	2 (6.3)	2 (3.7)	4 (4.7)
1	3 (9.4)	3 (5.6)	6 (7.0)
2	3 (9.4)	8 (14.8)	11 (12.8)
3	2 (6.3)	3 (5.6)	5 (5.8)
4	1 (3.1)	3 (5.6)	4 (4.7)
5	1 (3.1)	2 (3.7)	3 (3.5)
6	0 (0.0)	2 (3.7)	2 (2.3)
8	1 (3.1)	0 (0.0)	1 (1.2)
10	2 (6.3)	1 (1.9)	3 (3.5)
10+	0 (0.0)	1 (1.9)	1 (1.2)

Availability of Educational Resources

Respondents were asked questions related to availability of educational resources at home. Responses are presented in Table 9.4. Most respondents (87.2%, n=75) reported that they had time they devote to reading books daily, 59.3 (n=51) had books to read in their spare time, 94.2% (n=81) had a quiet place with enough room and light to do their homework, and 88.4% (n=76) participated in school trips and events.

Table 9.4 Education Resources (N=86)

Education Resources	Male (n=32) n(%)	Female (n=54) n(%)	Total (N=86) n(%)
On a daily basis, do you have time that you devote to reading books?	25 (78.1)	50 (92.6)	75 (87.2)
Do you have books you can read in your spare time?	12 (37.5)	39 (72.2)	51 (59.3)
Do you have a quiet place with enough room and light to do your homework?	30 (93.8)	51 (94.4)	81 (94.2)
Do you participate in school trips and events?	30 (93.8)	46 (85.2)	76 (88.4)

Educational Plans

In addition to school satisfaction and school related questions, respondents were asked about their education plans and how confident they were in their ability to achieve those plans. Most respondents (94.2%, n=81) planned to start secondary school after completing their primary school. About 46.9% (n=38) were “*extremely sure*” and 12.3% (n=10) were “*very sure*” of their educational plan. In addition, 39.5% (n=32) of respondents were “*extremely hopeful*” and 28.4% (n=23) were “*very hopeful*” that they would achieve their educational plan. In case attaining education fails, 44.4% (n=36) of respondents indicated that they would look for a job to support themselves and 28.4% (n=23) indicated that they will persist to the end of their education. When asked about what they wanted to be when they completed school, 33.7% (n=29) reported that they wanted to be medical doctors, 26.7% (n=23) wanted to be nurses, and 12.8% (n=11) wanted to be teachers. Only 10.5% (n=9) of the respondents belonged to a youth group or club.

Table 9.5. Future Educational Plans

Statement	Male (n=32) n(%)	Female (n=54) n(%)	Total (N=86) n(%)
What are your educational plans after completing primary school?			
Planning to start secondary school	31 (96.9)	50 (92.6)	81 (94.2)
Not planning to start secondary school	1 (3.1)	4 (7.4)	5 (5.8)
How sure are you that you will achieve your educational plans? (N=81)			
Not at all sure	4 (12.9)	6 (12.0)	10 (12.3)
Slightly sure	3 (9.7)	9 (18.0)	12 (14.8)
Moderately sure	4 (12.9)	7 (14.0)	11 (13.6)
Very sure	4 (12.9)	6 (12.0)	10 (12.3)
Extremely sure	16 (51.6)	22 (44.0)	38 (46.9)
How hopeful are you that you will achieve your educational plans? (N=81)			
Not at all hopeful	0 (0.0)	1 (2.0)	1 (1.2)
Not very hopeful	0 (0.0)	4 (8.0)	4 (4.9)
Somewhat hopeful	9 (29.0)	12 (24.0)	21 (25.9)
Very hopeful	9 (29.0)	14 (28.0)	23 (28.4)
Extremely hopeful	13 (41.9)	19 (38.0)	32 (39.5)

What plans do you have for your future incase attaining education fails? (N=81)			
I will give up and sit at home	2 (6.5)	2 (4.0)	4 (4.9)
I will look for a job to support myself	11 (35.5)	25 (50.0)	36 (44.4)
I will persist to the end of my education	15 (48.4)	8 (16.0)	23 (28.4)
Other plans	3 (9.7)	15 (30.0)	18 (22.2)

10. SOCIO-ECONOMIC STATUS OF THE FAMILY

Poverty

Questions in this section were adapted from the Uganda Household Survey [53] conducted by the Uganda Bureau of Statistics. All questions have been tested in our Suubi studies [31, 39-43]. Respondents were asked several questions to assess their relative level of poverty, including availability of basic needs, food consumption, household assets, and living arrangements. Results related to possession of basic needs and food consumption are presented in Table 10.1.

The majority of respondents (97.8%, n=87) owned at least more than two sets of clothes, 84.3% (n=75) owned a blanket, and 32.6% (n=29) owned at least one pair of shoes. In terms of food consumption, 91% (n=81) of respondents reported having had at least two meals per day in the last week, and 82.0% (n=73) had eaten meat or fish in the past week. Additionally, 15.7%, (n=14) of the respondents had not eaten breakfast on the day of the interview.

Table 10.1. Poverty Indicators (N=89)

Statement	Male (n=33) n(%)	Female (n=56) n(%)	Total (N=89) n(%)
How many sets of clothes do you have?			
None	0 (0.0)	0 (0.0)	0 (0.0)
One	0 (0.0)	1 (1.8)	1 (1.1)
Two	1 (3.0)	0 (0.0)	1 (1.1)
More than two	32 (97.0)	55 (98.2)	87 (97.8)
Do you have a blanket?			
No	5 (15.2)	9 (16.1)	14 (15.7)
Yes	28 (84.8)	47 (83.9)	75 (84.3)

How many pairs of shoes do you have?

None	3 (9.1)	2 (3.6)	5 (5.6)
One pair	15 (45.5)	14 (25.0)	29 (32.6)
Two pairs	6 (18.2)	22 (39.3)	28 (31.5)
More than two pairs	9 (27.3)	18 (32.1)	27 (30.3)

How often did you eat meat or fish in the last week?

None	4 (12.1)	12 (21.4)	16 (18)
Once	11 (33.3)	15 (26.8)	26 (29.2)
Twice	4 (12.1)	8 (14.3)	12 (13.5)
Three times	8 (24.2)	15 (26.8)	23 (25.8)
Every day	6 (18.2)	6 (10.7)	12 (13.5)

How often did you eat an egg in the last week?

None	7 (21.2)	27 (48.2)	34 (38.2)
Once	7 (21.2)	8 (14.3)	15 (16.9)
Twice	5 (15.2)	6 (10.7)	11 (12.4)
Three times	4 (12.1)	10 (17.9)	14 (15.7)
Every day	10 (30.3)	5 (8.9)	15 (16.9)

How often did you have milk in the last week?

None	10 (30.3)	24 (42.9)	34 (38.2)
Once	4 (12.1)	5 (8.9)	9 (10.1)
Twice	2 (6.1)	6 (10.7)	8 (9.0)
Three times	4 (12.1)	3 (5.4)	7 (7.9)
Every day	13 (39.4)	18 (32.1)	31 (34.8)

Average number of meals taken per day in the last week

None	0 (0.0)	2 (3.6)	2 (2.2)
One	0 (0.0)	6 (10.7)	6 (6.7)
Two	17 (51.5)	25 (44.6)	42 (47.2)
Three	16 (48.5)	23 (41.1)	39 (43.8)

In the last 7 days, how many times did you drink tea with sugar?

None	2 (6.1)	8 (14.3)	10 (11.2)
One	1 (3.0)	1 (1.8)	2 (2.2)
Two	2 (6.1)	4 (7.1)	6 (6.7)
Three	2 (6.1)	6 (10.7)	8 (9.0)

Everyday	26 (78.8)	37 (66.1)	63 (70.8)
Did you have breakfast today?			
No	6 (18.2)	8 (14.3)	14 (15.7)
Yes	27 (81.8)	48 (85.7)	75 (84.3)

Household facilities

Respondents were asked several questions related to their living arrangements and facilities to home. The majority (74.2%, n=66) lived in households with electricity (including solar), more than half (69.7%, n=62) reported that their houses were made of bricks, iron sheets and cemented floors, and 62.9% (n=56) reported that their houses had cemented floors. The average number of rooms per house was 3.7 (SD=1.7, range 1- 24). In addition, the majority of participants' households (96.6%, n=86) had a toilet facility, with 95.5% (n=85) reporting a pit latrine. About 88.8% (n= 79) of respondents' households used firewood to cook.

Table 10.2. Household Facilities (N=89)

Statement	Male (n=33) n(%)	Female (n=56) n(%)	Total (N=89) n(%)
How do you/your family cook			
With dung			
No	33 (100.0)	54 (96.4)	87 (97.8)
Yes	0 (0.0)	2 (3.6)	2 (2.2)
With Wood			
No	2 (6.1)	8 (14.3)	10 (11.2)
Yes	31 (93.9)	48 (85.7)	79 (88.8)
With Charcoal			
No	29 (87.9)	39 (69.6)	68 (76.4)
Yes	4 (12.1)	17 (30.4)	21 (23.6)
Does the house you live in have electricity (including solar)?			
No	9 (27.3)	14 (25.0)	23 (25.8)
Yes	24 (72.7)	42 (75.0)	66 (74.2)
What kind of house do you live in?			
Mud house	1 (3.0)	4 (7.1)	5 (5.6)
Brick house with iron sheets but not cemented floors	7 (21.2)	15 (26.8)	22 (24.7)

Brick house with iron sheets and cemented floors	25 (75.8)	37 (66.1)	62 (69.7)
What is the floor in your house where you live?			
Dirt sand	1 (3.0)	3 (5.4)	4 (4.5)
Dung floor	8 (24.2)	17 (30.4)	25 (28.1)
Tiled floor	2 (6.1)	2 (3.6)	4 (4.5)
Cement floor	22 (66.7)	34 (60.7)	56 (62.9)
Do you have a toilet facility?			
No	0 (0.0)	3 (5.4)	3 (3.4)
Yes	33 (100.0)	53 (94.6)	86 (96.6)
What kind of toilet facility do your family members use?			
Flush or pour flush toilet	0 (0.0)	3 (5.4)	3 (3.4)
Pit latrine	33 (100.0)	52 (92.9)	85 (95.5)
Other	0 (0.0)	1 (1.8)	1 (1.1)

Household Assets

Respondents were also asked about family assets. Responses are presented in Table 10.3. The majority of respondents' families owned their own homes (92.1%, n=82), land (87.6%, n=78), and more than half (55.1%, n=49) owned a bicycle – primarily used for transportation. The majority of households owned a radio (70.8%, n=63) or a cellphone (94.4%, n=84). It must be noted that Uganda's economy is primarily agricultural, so it is not surprising that the majority of households owned several gardens and farm animals. Only 44.9% (n=40) of households reported having a small business.

Table 10.3. Household Assets (N=89)

Variable	Male (n=33) n (%)	Female (n=56) n (%)	Total (n=89) n (%)
House	30 (90.9)	52 (92.9)	82 (92.1)
Rental property	6 (18.2)	6 (10.7)	12 (13.5)
Land	30 (90.9)	48 (85.7)	78 (87.6)
Motorcycle	11 (33.3)	15 (26.8)	26 (29.2)
Bicycle	20 (60.6)	29 (51.8)	49 (55.1)
Car	3 (9.1)	8 (14.3)	11 (12.4)
Television	9 (27.3)	16 (28.6)	25 (28.1)
Refrigerator/Fridge	1 (3.0)	4 (7.1)	5 (5.6)
Cell phone (mobile phone)	32 (97)	52 (92.9)	84 (94.4)

Radio	25 (75.8)	38 (67.9)	63 (70.8)
Fruit garden	16 (48.5)	30 (53.6)	46 (51.7)
Tomato garden	6 (18.2)	10 (17.9)	16 (18.0)
Maize Garden	25 (75.8)	38 (67.9)	63 (70.8)
Other gardens	30 (90.9)	47 (83.9)	77 (86.5)
Cows	10 (30.3)	14 (25.0)	24 (27.0)
Goats	11 (33.3)	19 (33.9)	30 (33.7)
Pigs	23 (69.7)	34 (60.7)	57 (64.0)
Poultry (for sale)	6 (18.2)	17 (30.4)	23 (25.8)
Any other animals	8 (24.2)	13 (23.2)	21 (23.6)
A small business/retail store/shop/kiosk	10 (30.3)	30 (53.6)	40 (44.9)

Family Financial Support

Respondents were asked to provide information on the person supporting their family financially, including their relationship to the respondent, employment status, and education level. About 32.6% (n=29) reported a biological mother, and 27% (n=24) reported a biological father as the personal financially supporting the family. Other individuals reported include grandparent, aunt, uncle, sister, brother, stepmother and sponsor 40.4% (n=36). The majority of respondents (79.8%, n=71) reported that the person who financially supported their family had no formal employment i.e., was not employed in the formal sector or did not earn a salary. In terms of education, more than half of respondents (60.7%, n=54) reported that they didn't know the education level of the person who financially supported their households, 18% (n=16) reported that the person has completed primary 7 and stopped, and 4.5% (n=4) reported that the person did not go to school.

11. STIGMA AND SHAME

Shame

Shame was measured by the Shame Questionnaire [54]. The scale has been adapted and validated to measure HIV-related shame among Ugandan youth living with HIV in our Suubi+Adherence study [55]. The 8-item scale is used to assess child's feelings of shame on a 3-point scale, with *0 = not true*, *1 = somewhat true* and *2 = very true*. The theoretical range is 0-16 (Cronbach's alpha = 0.72). As presented in Table 11.1 below, the total mean score was 2.8 (SD=3.0, actual range =0-11). Individual responses are presented in Table A.10 of the Appendix.

Table 11.1. Shame Questionnaire (N=89)

Statement	Mean (SD)
I feel ashamed because I think that people can tell from looking at me that I have HIV.	0.6 (0.8)
I want to go away by myself and hide because I have HIV.	0.3 (0.6)
I am ashamed because I feel I am the only person with HIV in my school/village	0.3 (0.7)
Having HIV makes me feel dirty.	0.3 (0.6)
Because I have HIV, I feel like covering my body.	0.5 (0.8)
Because I have HIV, I wish I were invisible	0.4 (0.6)
Because I have HIV, I feel disgusted with myself	0.2 (0.5)
Because I have HIV, I feel exposed.	0.3 (0.6)
Total Mean Score	2.8 (3.0)
Range	0-11

Stigma by Association

Stigma by association was measured using 10-items adapted from the Brief Stigma-by Association Scale [56]. The scale measures experiences and consequences of associated stigma, on a 3-point scale with 0= *Not at all*, 1= *Sometimes* and 2= *All the time*. The theoretical range for the scale is 0-20 (Cronbach alpha 0.88). As presented in Table 11.2, the overall mean score was 3.9 (SD=4.6, range= 0-18). Results are presented in Table 11.2 below and individual responses are presented in Table A.11 of the appendix.

Table 11.2. Stigma by Association Scale (N=89)

Statement	Mean (SD)
I've been teased	0.3 (0.6)
I've been treated badly.	0.4 (0.6)
I've been gossiped about	0.5 (0.7)
I feel different or alone.	0.5 (0.6)
I worry about rejection.	0.4 (0.7)
I avoid making new friends	0.5 (0.8)
People are afraid of me	0.4 (0.7)
People think I am a bad person.	0.3 (0.6)
People avoid touching me	0.3 (0.6)
Parents who know don't want me around their kids	0.3 (0.6)
Total Mean Score	3.9 (4.6)
Range	0-18

HIV Stigma

Stigma was measured by the HIV Stigma Scale (HSS), a 40-item measure of stigma and psychosocial aspects of having HIV [57]. Responses were captured using a 4-point scale with *1= strongly agree, 2= agree, 3=disagree and 4=strongly disagree*. Items in the inverse direction were reverse coded to create summated scores, with higher scores indicating high levels of HIV-related stigma. The theoretical range for this scale is 40-160 (Cronbach's alpha = 0.90). As presented in Table 11.3 below, the overall mean score was 80.3 (SD=19.2, range= 48-145). Individual item responses are presented in Table A.12 of the Appendix.

Table 11.3. HIV Stigma Measure (N=89)

Statement	Mean (SD)
In many areas of my life, no one knows I have HIV.	2.7 (1.3)
I feel guilty because I have HIV.	2.1 (1.3)
People's attitudes make me feel worse about myself.	2.0 (1.2)
Telling someone I have HIV is risky	2.0 (1.2)
People with HIV lose jobs when employers learn about their HIV status.	2.1 (1.2)
I work hard to keep my HIV status a secret	3.2 (1.1)
I feel I'm not as good as others because I have HIV	1.8 (1.1)
I never feel ashamed of having HIV*	2.3 (1.2)
People with HIV are treated like outcasts	1.9 (1.1)
Most people believe a person who has HIV is dirty	1.7 (1.1)
It is easier to avoid friendships than to worry about telling people about my HIV status.	2.1 (1.2)
Having HIV makes me feel unclean	1.7 (1.1)
I feel set apart, isolated from the rest of the world	1.8 (1.1)
Most people think a person with HIV is disgusting.	1.7 (1.1)
Having HIV makes me feel I'm a bad person	1.6 (1.0)
Most people with HIV are rejected when others learn about their status	2.2 (1.2)
I am very careful with whom I tell that I have HIV	2.4 (1.3)
Some people who know about my HIV status have grown more distant	1.9 (1.2)
I worry about people discriminating against me	1.9 (1.1)
Most people are uncomfortable around someone with HIV	2.0 (1.1)
I never feel I have to hide the fact that I have HIV*	2.9 (1.2)
I worry that people may judge me when they learn about my HIV status.	1.7 (0.9)
Having HIV in my body is disgusting to me	1.7 (1.0)
I am hurt by how people react when they learn I have HIV.	2.1 (1.1)
I worry people who know I have HIV will tell others	2.0 (1.2)
I regret having told some people that I have HIV	1.9 (1.0)
As a rule, telling others has been a mistake	2.0 (1.2)
People avoid touching me if they know I have HIV.	1.9 (1.1)
People I care about stopped calling me after learning that I have HIV	1.8 (1.1)

Some people have told me that HIV is what I deserved for how I lived.	1.6 (1.0)
Some people fear that they'll be rejected because of my HIV	1.9 (1.1)
People don't want me around their children once they know I have HIV	1.9 (1.1)
People have physically backed away from me when they know I have HIV	1.9 (1.1)
Some people act as though it's my fault I have HIV.	2.0 (1.1)
Some people with HIV stopped socializing with others due to their reactions to them	2.2 (1.2)
I have lost friends by telling them I have HIV	1.8 (1.1)
I have told people close to me to keep my HIV secret.	2.3 (1.2)
People who know tend to ignore my good points	2.2 (1.2)
People seem afraid of me because I have HIV	1.8 (1.0)
Knowing, they look for flaws in your character	1.9 (1.1)
Total Mean Score	80.3 (19.2)
Range	48-145

*Item has been reverse-coded so that higher scores reflect higher levels of stigma

HIV Internalized and Anticipated Stigma

Respondents internalized and anticipated stigma were assessed using items tested in our Suubi+Adherence study [31, 58]. Respondents were asked to indicate to what extent they agreed with 9 statements that people with HIV have made about themselves (internalized stigma), and how HIV affects people (anticipated stigma). Responses were assessed using a 4-point scale: *1=strongly disagree, 2=disagree, 3=agree and 4=strongly agree*. Summated scores were created with higher scores indicating high levels of internalized and anticipated stigma. The total mean score was 17.0 (SD=5.5; actual range=9-33). Results are presented in Table 11.4 below and individual responses are presented in Table A.13 of the Appendix.

Table 11.4. HIV Internalized and Anticipated Stigma (N=89)

Statement	Mean (SD)
Internalized Stigma	
When people know I have HIV I feel uncomfortable around them.	1.8 (1.1)
Although I have HIV, I am a person of worth. *	1.9 (1.2)
I am embarrassed about having HIV.	2.0(1.2)
I feel guilty about having HIV.	1.9 (1.1)
I understand why people would reject my friendship because I have HIV.	1.9 (1.1)
I think less of myself because I have HIV.	1.8 (1.1)
<i>Subscale Mean</i>	11.4

<i>Range</i>	6-21
Anticipated Stigma	
Having HIV affects whether people want to be friends with you	2.0 (1.2)
Having HIV affects whether people like you or not	1.9 (1.1)
Having HIV affects whether or not you are asked to go out on dates or go to a party	1.7 (1.0)
<i>Subscale Mean</i>	5.6
<i>Range</i>	3-12
Grand Mean Score	17.0
Range	9-33

12. MENTAL HEALTH FUNCTIONING

Child Depression Inventory (CDI)

Respondents' depressive symptoms were measured using the Child Depression Inventory [59]. The 14- item scale measures children's depressive symptoms. Respondents were asked to mark a statement that best described their feelings during the past 2 weeks. Each item on the CDI has three response options that correspond to varying levels of symptomology for clinical depression. The theoretical range for this scale is 0-28. Respondents scored between 0-16 (Cronbach's Alpha 0.61). The overall mean score for the CDI was 5.0 (SD =3.6, range = 0-16). Individual response data is presented in Table A.14 of the Appendix.

Tennessee Self Concept Scale (TSCS)

Self-concept was measured using the Tennessee Self-Concept Scale [60]. The 20-item scale measures children's perception of identity, self-satisfaction and other behaviors. Each of the 20 items was rated on a 5-point scale: 1= *always false*, 2=*usually false*, 3=*sometimes true/sometimes false*, 4=*usually true* and 5= *always true* (theoretical range: 20-100). Ten items in the inverse direction were reverse coded to create summated scores, with higher scores indicating higher levels of child self-concept (Cronbach's alpha = 0.81). The actual range for this scale was 48-100, with an overall mean score of 76.0 (SD =12.3). Individual item responses are presented in Table A.15 in the Appendix.

Beck Hopelessness Scale (BHS)

Hopelessness was measured using the Beck Hopelessness Scale (BHS) [61]. The 20-item scale measures children's hopelessness and pessimistic attitudes toward the future. Items have a "true" or "false" response coded as "1" or "0" respectively. Nine items with positive wording were reverse coded to create a summated score for the entire scale. The theoretical range for the BHS is 0-20, with higher scores indicating higher levels of hopelessness (Cronbach's alpha 0.68). The actual range was 0-12, with an overall mean score of 5.9 (SD =3.2). Individual response data is presented in Table A.16 of the Appendix.

Child Post Traumatic Stress Disorder (PTSD) Reaction Index

Child PTSD was measured using 31 items adapted from the abbreviated Childhood post-traumatic Stress Reaction Index (CPTS-RI) [62]. Participants were asked about reactions people sometimes have after very bad things happen and how this was applicable to them in the past month. Responses were rated on a 5-point Likert scale, with 0= *None*, 1= *Little (1-2 days a week)*, 2 = *some (2-3 days a week)*, 3 =*Much (2 days a month)* and 4 =*most (Almost every day)*. The theoretical range is 0-124, with higher scores indicating higher levels of child PTSD symptoms. The actual range was 0-94 (Cronbach alpha = 0.92), with an overall mean score of 30.4 (SD= 22.1, range 0-94). Individual responses are presented in Table A.17. of the Appendix.

UCLA Loneliness Scale

Loneliness was assessed using the UCLA Loneliness Scale [63]. The 20-item scale measures one's subjective feelings of loneliness as well as feelings of social isolation. Responses are rated on 4-point Likert scale with 3=*I often feel this way*, 2= *I sometimes feel this way*, 1 = *I rarely feel this way*, and 0=*I never feel this way*. The theoretical range for this scale is 0-60, with high scores indicating higher levels of social isolation. The overall mean score was 13.3 (SD = 10.8, actual range = 0-42). Individual item responses are presented in Table A.18. of the Appendix.

13. PERSONAL HEALTH

Questions in this section were tested in our Suubi studies [31, 39-43]. Respondents were asked several questions regarding their personal health including overall life and physical health satisfaction, energy levels, and medication intake. Participants' reports are presented in Table 13.1 below. Respondents were generally satisfied with their life. About 52.8% (n=47) were

“extremely satisfied” with their life. Over half of respondents (50.6%, n= 45) rated their physical health as *“excellent”* and 27% (n=24) reported that they *“sometimes”* experienced low energy. In terms of medication intake, 93.3% (n=83) reported that they were not taking any other medications apart from their prescribed HIV medication.

Table 13.1. Personal Health (N=89)

Statement	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
How satisfied are you with your life overall?			
Not Satisfied at all	2 (6.1)	3 (5.4)	5 (5.6)
Not Very Satisfied	1 (3.0)	2 (3.6)	3 (3.4)
Somewhat Satisfied	1 (3.0)	8 (14.3)	9 (10.1)
Very Satisfied	13 (39.4)	12 (21.4)	25 (28.1)
Extremely Satisfied	16 (48.5)	31 (55.4)	47 (52.8)
At present time, would you say that your physical health is			
Very Poor	2 (6.1)	3 (5.4)	5 (5.6)
Fair	0 (0.0)	8 (14.3)	8 (9.0)
Good	16 (48.5)	15 (26.8)	31 (34.8)
Excellent	15 (45.5)	30 (53.6)	45 (50.6)
I have low energy			
Never	13 (39.4)	18 (32.1)	31 (34.8)
Almost Never	6 (18.2)	10 (17.9)	16 (18.0)
Sometimes	11 (33.3)	13 (23.2)	24 (27.0)
Often	3 (9.1)	10 (17.9)	13 (14.6)
Almost Always	0 (0.0)	5 (8.9)	5 (5.6)
Do you take any other medications?			
No	29 (87.9)	54 (96.4)	83 (93.3)
Yes	4 (12.1)	2 (3.6)	6 (6.7)

14. MEDICATION ADHERENCE

Respondents were asked several questions regarding their HIV medication, including medication regimen, availability of support to take their medicine, and adherence to the prescribed medicine. All these items were tested in our Suubi+ Adherence study [31]. Results are presented in Table 14.1.

All respondents reported taking daily medication, and almost half (49.4%, n=44) reported taking 2 different medicines a day. In terms of medicine support, over one third of respondents (38.2%, n=34) reported being reminded by their mothers to take their medications, and 30.3% (n=27) reported being reminded by their grandparents. About 37% (n=41.6) reported being reminded “*always*”, and more than half (57.3%, n=51) reported that this person will “*very likely know*” if they missed their medication. In addition, 77.5% (n=69) reported that they “*never*” urge with the person who reminds them to take their medicine.

Regarding adherence, 69.7% (n=62) reported that they had “*never*” missed any medication, 48.3% (n=43) reported doing an “*excellent*” job taking their medicine in the way they were supposed to, and 69.7% (n=62) reported “*always*” taking their medicine as prescribed. In addition, more than half of the respondents (74.2%, n=66) reported that it is “*not hard at all*” for them to take their medication as prescribed. Overall, 71.9% (n=64) of respondents reported that they never miss taking any of their medications in the past 6 months.

Table 14.1. Medication Adherence (N=89)

Statement	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
How many different HIV medicines do you take?			
1	11 (33.3)	20 (35.7)	31 (34.8)
2	16 (48.5)	28 (50.0)	44 (49.4)
3	6 (18.2)	8 (14.3)	14 (15.7)
Who helps you take your HIV medications or helps you remember to take them?			
Mother	13 (39.4)	21 (37.5)	34 (38.2)
Father	3 (9.1)	7 (12.5)	10 (11.2)
Aunt	3 (9.1)	5 (8.9)	8 (9.0)
Sister	2 (6.1)	1 (1.8)	3 (3.4)
Grandparent	10 (30.3)	17 (30.4)	27 (30.3)
No one	2 (6.1)	1 (1.8)	3 (3.4)

Other (cousin, school matron, stepmother)	0 (0.0)	4 (7.1)	4 (4.5)
How often does this person help you when it comes to taking your medication?			
Sometimes	7 (21.2)	11 (19.6)	18 (20.2)
About half the time	6 (18.2)	5 (8.9)	11 (12.4)
Most of the time	8 (24.2)	12 (21.4)	20 (22.5)
Always	10 (30.3)	27 (48.2)	37 (41.6)
Not applicable	2 (6.1)	1 (1.8)	3 (3.4)
How likely is it that this person would know when you miss your medication?			
Very likely	18 (54.5)	33 (58.9)	51 (57.3)
Somewhat likely	10 (30.3)	12 (21.4)	22 (24.7)
Somewhat unlikely	2 (6.1)	4 (7.1)	6 (6.7)
Very unlikely	1 (3.0)	6 (10.7)	7 (7.9)
Not applicable	2 (6.1)	1 (1.8)	3 (3.4)
When was the last time you missed any of your medication?			
Never missed medications	25 (75.8)	37 (66.1)	62 (69.7)
Within the past week	4 (12.1)	10 (17.9)	14 (15.7)
1-2 weeks ago	1 (3.0)	3 (5.4)	4 (4.5)
2-4 weeks ago	0 (0.0)	1 (1.8)	1 (1.1)
1-3 months ago	0 (0.0)	1 (1.8)	1 (1.1)
More than 3 months ago	3 (9.1)	4 (7.1)	7 (7.9)
In the last 30 days, on how many days did you miss at least one dose of any of your HIV medicines?			
0	27 (81.8)	41 (73.2)	68 (76.4)
1	2 (6.1)	7 (12.5)	9 (10.1)
2	1 (3)	6 (10.7)	7 (7.9)
3	2 (6.1)	1 (1.8)	3 (3.4)
4	0 (0.0)	1 (1.8)	1 (1.1)
8	1 (3.0)	0 (0.0)	1 (1.1)
On the days missed, how many doses did you miss (N=21)?			
1	1 (16.7)	6 (40.0)	7(33.3)
2	1 (16.7)	5 (33.3)	6(28.6)
3	3 (50.0)	1 (6.67)	4(19.1)

4	0 (0.0)	2 (13.3)	2(9.5)
5	0 (0.0)	1 (6.67)	1(4.8)
8	1 (16.7)	0 (0.0)	1(4.8)

In the last 30 days, how good a job did you do at taking your HIV medicine as prescribed?

Very Poor	1 (3.0)	1 (1.8)	2 (2.2)
Fair	2 (6.1)	5 (8.9)	7 (7.9)
Good	0 (0.0)	8 (14.3)	8 (9.0)
Very Good	10 (30.3)	19 (33.9)	29 (32.6)
Excellent	20 (60.6)	23 (41.1)	43 (48.3)

In the last 30 days, how often did you take your HIV medicine as prescribed?

Never	0 (0.0)	1 (1.8)	1 (1.1)
Sometimes	1 (3.0)	5 (8.9)	6 (6.7)
Usually	2 (6.1)	2 (3.6)	4 (4.5)
Almost Always	6 (18.2)	10 (17.9)	16 (18.0)
Always	24 (72.7)	38 (67.9)	62 (69.7)

How hard is it for you to take your HIV medicine as prescribed?

Extremely hard	0 (0.0)	3 (5.4)	3 (3.4)
Very hard	0 (0.0)	1 (1.8)	1 (1.1)
Somewhat hard	5 (15.2)	2 (3.6)	7 (7.9)
Not very hard	3 (9.1)	9 (16.1)	12 (13.5)
Not hard at all	25 (75.8)	41 (73.2)	66 (74.2)

How often do you argue with the person helping you take your medicine?

Never	24 (72.7)	45 (80.4)	69 (77.5)
Rarely	3 (9.1)	6 (10.7)	9 (10.1)
Sometimes	3 (9.1)	3 (5.4)	6 (6.7)
Usually	0 (0.0)	1 (1.8)	1 (1.1)
Always	1 (3.0)	0 (0.0)	1 (1.1)
Not applicable	2 (6.1)	1 (1.8)	3 (3.4)

In general, over the past 6 months, how often did you miss taking your medication?

I have not taken any medication over the past 6 months	2 (6.1)	0 (0.0)	2 (2.2)
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I hardly ever take any of my medicines	1 (3.0)	0 (0.0)	1 (1.1)
I miss taking about half of my medicines	0 (0.0)	1 (1.8)	1 (1.1)
I miss taking my medicines a little bit of the time	4 (12.1)	17 (30.4)	21 (23.6)
I never miss taking any of my medicines/I take my medicines all of the time	26 (78.8)	38 (67.9)	64 (71.9)

15. HIV/AIDS

HIV Status Disclosure

All items in this section were tested in our Suubi studies [31, 39-43, 58]. To assess HIV status disclosure, respondents were asked several questions about sharing information on their HIV status with other people. As presented in Table 15.1, 22.5% (n=20) reported that they “*always*” keep their HIV status a secret from others, including friends and family members, 37% (n=33) reported that they “*never*” keep their status a secret, and 65.2% (n= 58) reported that “*none*” of their friends knows that they are HIV positive. In addition, 38.2% (n=34) of respondents reported that other people found out about their HIV status because they saw them taking their medicine, and 29.2% (n=26) reported that it was because someone else told them. About 60.7% (n=54) of respondents reported that they “*never*” talk to people about their HIV status.

Table 15.1. HIV Status Disclosure (N=89)

Statement	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
Do you keep your HIV status a secret from others (friends, family)			
Never	8 (24.2)	25 (44.6)	33 (37.1)
Sometimes	4 (12.1)	9 (16.1)	13 (14.6)
About half the time	3 (9.1)	1 (1.8)	4 (4.5)
Most of the time	9 (27.3)	10 (17.9)	19 (21.3)
Always	9 (27.3)	11 (19.6)	20 (22.5)
Do any of your friends know that you have HIV?			
Uncertain/Not sure	0 (0.0)	3 (5.4)	3 (3.4)
None	23 (69.7)	35 (62.5)	58 (65.2)

Few	5 (15.2)	12 (21.4)	17 (19.1)
Some	3 (9.1)	6 (10.7)	9 (10.1)
All	2 (6.1)	0 (0.0)	2 (2.2)

When people find out you have HIV, is it usually because

You are taking medicine for treatment	14 (42.4)	20 (35.7)	34 (38.2)
Symptoms start showing	5 (15.2)	6 (10.7)	11 (12.4)
Someone else tells them	9 (27.3)	17 (30.4)	26 (29.2)
You become ill	0 (0.0)	4 (7.1)	4 (4.5)
You tell them	1 (3.0)	6 (10.7)	7 (7.9)
Other- Specify	4 (12.1)	3 (5.4)	7 (7.9)
Don't know	1 (25.0)	0 (0.0)	1 (14.3)
Don't know of anyone who knows my status.	1 (25.0)	0 (0.0)	1 (14.3)
It's really very difficult for other people to know my status.	1 (25.0)	0 (0.0)	1 (14.3)
Nobody knows my status apart from family members because we don't disclose my status to other people	0 (0.0)	1 (33.3)	1 (14.3)
No response	0 (0.0)	1 (33.3)	1 (14.3)
See me getting my ART refills	1 (25.0)	0 (0.0)	1 (14.3)
They see me going to the ART clinic	0 (0.0)	1 (33.3)	1 (14.3)

How often do you talk to people about your HIV status

Never	24 (72.7)	30 (53.6)	54 (60.7)
Rarely	6 (18.2)	16 (28.6)	22 (24.7)
Sometimes	2 (6.1)	9 (16.1)	11 (12.4)
Most of the time	0 (0.0)	1 (1.8)	1 (1.1)
All of the time	1 (3.0)	0 (0.0)	1 (1.1)

HIV Status Disclosure Comfort

Respondents were asked four questions regarding their level of comfort talking about their HIV status with others. Responses were measured using a 4-item scale 1= *very uncomfortable*, 2=*somewhat uncomfortable*, 3= *somewhat comfortable*, and 4=*very comfortable*. The total mean score was 8.3 (SD=3.2, actual range = 3-16), indicating moderate levels of comfort disclosing their HIV status to their friends and family members. Results are presented in Table 15.2 and individual responses are presented in Table A.19. of the Appendix.

Table 15.2. HIV Status Disclosure Comfort (N=89)

Statement	Mean (SD)
How comfortable do you feel talking about your HIV status to other kids in school	2.0 (1.0)
How comfortable do you feel talking about your HIV status to your close friends	2.0 (1.0)
How comfortable do you feel talking about your HIV status to family members who do not know	2.4 (1.1)
How comfortable do you think you would feel talking about your HIV status to a girlfriend/boyfriend	2.1 (1.1)
Total Mean Score	8.3 (3.2)
Range	3-16

HIV/AIDS Transmission Knowledge

Knowledge on HIV/AIDS transmission was assessed by asking respondents if five unique behaviors were safe to engage in with an HIV positive person. Response options included: 1=*not sure*, 2=*unsafe* and 3=*safe*. Responses are presented in Table 15.3. Respondents demonstrated knowledge of the most unsafe and high-risk behaviors i.e., both having unprotected sex (74.2%, n=66) and sharing a needle (71.9%, n=64) with an HIV positive person. However, participants also rated some behaviors that are considered safe, as unsafe. For example, 41.6% (n=37) of participants reported that kissing an HIV positive person is unsafe, and 37.1% (n=33) reported that touching a toilet seat that an HIV positive person has touched is unsafe.

Table 15.3. HIV/AIDS Transmission Knowledge (N=89)

Statement	Not Sure n (%)	Unsafe n (%)	Safe n (%)
Sharing needles or syringes with an HIV-infected person.	20 (22.5)	64 (71.9)	5 (5.6)
Having unprotected sex with an HIV-infected person.	17 (19.1)	66 (74.2)	6 (6.7)
Holding hands with an HIV-infected person.	17 (19.1)	26 (29.2)	46 (51.7)
Touching toilet seats, spoons, cups, or other objects after a person infected with HIV/AIDS.	22 (24.7)	33 (37.1)	34 (38.2)
Kissing a person who is infected with HIV/AIDS.	32 (36.0)	37 (41.6)	20 (22.5)

HIV/AIDS General Knowledge

General knowledge of HIV/AIDS was also assessed by asking respondents to indicate which of the 8 statements were correct about HIV/AIDS. Response options were *1=not sure, 2=false and 3=true*. Participants' responses are presented in Table 15.4. Similar to HIV transmission knowledge, there was some variability in respondents' HIV general knowledge. Majority of respondents were able to accurately answer items such as, "Anyone can become infected with HIV/AIDS" (61.8%, n=55), "A pregnant woman who has HIV/AIDS can give it to her unborn baby" (77.5%, n=69), and "There is test to determine if a person is HIV positive" (69.7%, n=62). However, 42.7% (n=38) also incorrectly reported that "there is a cure for HIV" and 28% (n=25) reported that "a woman is protected from HIV infection if she is using birth control pills."

Table 15.4. HIV/AIDS General Knowledge (N=89)

Statement	Not Sure <i>n (%)</i>	False <i>n (%)</i>	True <i>n (%)</i>
You can look at a person and tell if they are infected with HIV/AIDS.	23 (25.8)	54 (60.7)	12 (13.5)
A pregnant woman who has HIV/AIDS can give her unborn baby the virus.	12 (13.5)	8 (9.0)	69 (77.5)
There is a cure for HIV/AIDS.	22 (24.7)	29 (32.6)	38 (42.7)
If a woman is using birth control pills, she is protected from HIV infection.	30 (33.7)	34 (38.2)	25 (28.1)
You can get HIV from a mosquito bite.	19 (21.3)	48 (53.9)	22 (24.7)
You can get HIV from using the same washing basin with an HIV infected person	16 (18.0)	54 (60.7)	19 (21.3)
There is a test to determine if a person has HIV/AIDS.	14 (15.7)	13 (14.6)	62 (69.7)
Anyone can become infected with HIV/AIDS.	15 (16.9)	19 (21.3)	55 (61.8)

HIV/AIDS Prevention Attitudes

Further, respondents were asked how people can reduce their chances of becoming infected with HIV/AIDS, based on the behavioral change model of ABC (Abstinence, Be faithful and use of Condoms). Respondents were asked to rate each of the three items as: *1=not sure, 2=false or 3=not sure*. As presented in Table 15.5 below, the majority of respondents knew that all three prevention methods could lower their risk of becoming infected with HIV/AIDS. The ABC model has been implemented widely in school curriculum throughout Uganda.

Table 15.5. HIV/AIDS Prevention Attitudes (N=89)

Statement	Not Sure <i>n (%)</i>	False <i>n (%)</i>	True <i>n (%)</i>
Not having sexual intercourse with anyone.	22 (24.7)	20 (22.5)	47 (52.8)
Using condoms.	25 (28.1)	16 (18.0)	48 (53.9)
Having sexual intercourse with only one partner, who is not Infected with HIV/AIDS.	17 (19.1)	29 (32.6)	43 (48.3)

HIV/AIDS Clinical Knowledge

Finally, participants' clinical knowledge was assessed. Participants were asked to indicate whether the statement related to HIV treatment was either 3=*true*, 2=*false* or 1=*not sure*. As presented in Table 15.6 below, the majority of respondents correctly reported critical information regarding HIV clinical knowledge, including viral suppression.

Table 15.6. HIV/AIDS Clinical Knowledge (N=89)

Statement	Not Sure <i>n (%)</i>	False <i>n (%)</i>	True <i>n (%)</i>
CD4 count testing measures how many soldier cells we have in our blood that fight HIV.	19 (21.3)	11 (12.4)	59 (66.3)
When a person is feeling healthy or their CD4 count is high it is okay for them to stop taking their medication.	13 (14.6)	58 (65.2)	18 (20.2)
When a person's CD4 count drops he/she has fewer soldier cells to fight infections.	15 (16.9)	22 (24.7)	52 (58.4)
Medication for HIV should be taken 2 times a day and doses should be evenly spaced out.	9 (10.1)	17 (19.1)	63 (70.8)
Viral load tests measure how much HIV is in the blood.	11 (12.4)	20 (22.5)	58 (65.2)
If the viral load is "undetectable", this means there is no virus left in the body.	17 (19.1)	20 (22.5)	52 (58.4)
If we say that the virus is "resistant" to a particular medicine that means that the medicine no longer works to lower or slow down the virus.	12 (13.5)	20 (22.5)	57 (64.0)
The virus can become resistant if medication doses are missed.	12 (13.5)	20 (22.5)	57 (64.0)
HIV can be passed from mother to child.	8 (9.0)	13 (14.6)	68 (76.4)

16. ACCESS TO CARE

Access to Medical Care

Respondents' ability to access medical care in the past 12 months was assessed using 6-items [64-65]. Responses were rated on a 5-point scale with 1 = *Strongly Agree*, 2= *Somewhat Agree*, 3= *Uncertain*, 4= *Somewhat Disagree*, and 5= *Strongly Disagree*. Table 16.1 presents the mean scores and standard deviations for each item, and the overall mean score. The overall mean score was 14.8 (SD= 6.0, range = 6-30). Respondents rated highly their inability to access medical when they needed because it was too expensive (mean= 3.4, SD= 1.6), and hard to get medical care in an emergency situation (mean = 2.8, SD= 1.7). Individual responses are presented in Table A.20 of the Appendix.

Table 16.1. Access to Medical Care (N=89)

Statement	Mean (SD)
If I need medical care, I can get admitted without any trouble	1.9 (1.4)
It is hard for me to get medical care in an emergency.	2.8 (1.7)
Sometimes I go without the medical care I need because it is too expensive.	3.4 (1.6)
I have easy access to the medical specialists that I need.	2.3 (1.6)
Places where I can get medical care are very conveniently located.	2.2 (1.6)
I am able to get medical care whenever I need it.	2.1 (1.5)
Total Mean Score	14.8 (6.0)
Range	6-30

Barriers to Medical Care

Similarly, respondents were asked to think about the reasons for not getting the medical care they needed or that was recommended to them [66] with *agree or disagree* responses. Overall, the majority of respondents (46.1%, n=41) agreed that they did not have transportation to medical care, 41.6% (n=37) indicated that the clinic hours were inconvenient for them, and 40.4% (n=36) were unable to pay for medical care. Results are presented in Table 16.2 below.

Table 16.2. Barriers to Medical Care (N=89)

Statement	Agree n (%)	Disagree n (%)
I was unable to pay for medical care	36 (40.4)	53 (59.6)
I was not sure where to go to get medical care	33 (37.1)	56 (62.9)
I did not have transportation to medical care	41 (46.1)	48 (53.9)
The clinic's hours of operation were inconvenient for me	37 (41.6)	52 (58.4)
I was treated poorly at a clinic in the past	24 (27.0)	65 (73.0)
I did not want to be seen at a clinic	24 (27.0)	65 (73.0)
I do not trust doctors	22 (24.7)	67 (75.3)
I don't really care about taking care of myself at this time	21 (23.6)	68 (76.4)

17. YOUTH RISK BEHAVIOR SURVEY

Questions in this section were adapted from the Youth Risk Behavior Survey [67] and were tested in our Suubi studies [31, 39-43]. Respondents were asked about cigarette and marijuana use, alcohol use, sexual risk behaviors, as well as rates of peer pressure surrounding these behaviors.

Cigarette Smoking

Responses related to cigarette smoking are presented in Table 17.1. Self-reported cigarette smoking was minimal at baseline. Of the total 89 respondents, none of the respondents reported that they had tried smoking. Only 4 participants reported getting pressured by peers to smoke cigarettes. Similarly, only 2 respondents reported that “less than half” or “more than half” of their closest friends smoked.

Table 17.1. Cigarettes Smoking (N=89)

Statement	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
Have you ever tried cigarette smoking, even one or two puffs?			
No	33 (100)	56 (100)	89 (100)
Yes	0 (0.0)	0 (0.0)	0 (0.0)
How much peer pressure is there on people your age to smoke cigarettes?			
None	33 (100)	52 (92.9)	85 (95.5)
A little	0 (0.0)	2 (3.6)	2 (2.2)
A moderate amount	0 (0.0)	0 (0.0)	0 (0.0)

A lot	0 (0.0)	1 (1.8)	1 (1.1)
A great deal	0 (0.0)	1 (1.8)	1 (1.1)
How often do you feel peer pressure to smoke cigarettes?			
Never	33 (100)	55 (98.2)	88 (98.9)
Sometimes	0 (0.0)	0 (0.0)	0 (0.0)
About half the time	0 (0.0)	0 (0.0)	0 (0.0)
Most of the time	0 (0.0)	1 (1.8)	1 (1.1)
Always	0 (0.0)	0 (0.0)	0 (0.0)
Of your closest friends, how many smoke cigarettes?			
None	32 (97.0)	55 (98.2)	87 (97.8)
Less than half	0 (0.0)	1 (1.8)	1 (1.1)
About half	0 (0.0)	0 (0.0)	0 (0.0)
More than half	1 (3.0)	0 (0.0)	1 (1.1)
All	0 (0.0)	0 (0.0)	0 (0.0)

Marijuana use

Responses related to marijuana use in the past 30 days are presented in Table 17.2. Of the total 89 respondents, none reported ever trying marijuana. Only two respondents reported feeling pressured to smoke marijuana and only 3 reported that “*less than half*” or “*about half*” of their closest friends smoked marijuana.

Table 17.2. Marijuana use (N=89)

Statement	Male (n=33) <i>n (%)</i>	Female (n=56) <i>n (%)</i>	Total (N=89) <i>n (%)</i>
Have you ever tried marijuana?			
No	33 (100)	56 (100)	89 (100)
Yes	0 (0.0)	0 (0.0)	0 (0.0)
How much peer pressure is there on people your age to smoke marijuana?			
None	33 (100)	54 (96.4)	87 (97.8)
A little	0 (0.0)	1 (1.8)	1 (1.1)
A moderate amount	0 (0.0)	1 (1.8)	1 (1.1)
A lot	0 (0.0)	0 (0.0)	0 (0.0)
A great deal	0 (0.0)	0 (0.0)	0 (0.0)

How often do you feel peer pressure to smoke marijuana?			
Never	33 (100)	54 (96.4)	87 (97.8)
Sometimes	0 (0.0)	2 (3.6)	2 (2.2)
About half the time	0 (0.0)	0 (0.0)	0 (0.0)
Most of the time	0 (0.0)	0 (0.0)	0 (0.0)
Always	0 (0.0)	0 (0.0)	0 (0.0)
Of your closest friends, how many smoke marijuana?			
None	33 (100)	54 (96.4)	87 (97.8)
Less than half	0 (0.0)	1 (1.8)	1 (1.1)
About half	0 (0.0)	1 (1.8)	1 (1.1)
More than half	0 (0.0)	0 (0.0)	0 (0.0)
All	0 (0.0)	0 (0.0)	0 (0.0)

Alcohol use

Respondents' history of alcohol use was assessed. Drinking alcohol included beer, wine, and liquor such as whiskey, local brew, including Uganda Waragi, Mwenge bigere, or Tonto. Drinking a few sips of wine for religious purposes was excluded. The responses are presented in Table 17.3. Of the 89 respondents, only 1 had ever had a drink of alcohol. Only 2 respondents reported being pressured to drink alcohol. Other than marijuana, cigarettes and alcohol, all 89 participants reported that they have never used anything else/any other drug to make them high. However, 1 respondent reported feeling pressured to smoke these other drugs and 3 respondents reported "*less than half*" or "*about half*" of their closest friends smoking this drug.

Table 17.3. Alcohol Use (N=89)

Statement	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
Have you ever had a drink of alcohol, other than a few sips?			
No	32 (97)	56 (100)	88 (98.9)
Yes	1 (3.0)	0 (0.0)	1 (1.1)
How much peer pressure is there on people your age to drink alcohol?			
None	33 (100.0)	54 (96.4)	87 (97.8)
A little	0 (0.0)	2 (3.6)	2 (2.2)
A moderate amount	0 (0.0)	0 (0.0)	0 (0.0)
A lot	0 (0.0)	0 (0.0)	0 (0.0)
A great deal	0 (0.0)	0 (0.0)	0 (0.0)

How often do you feel peer pressure to drink alcohol?			
Never	33 (100.0)	54 (96.4)	87 (97.8)
Sometimes	0 (0.0)	2 (3.6)	2 (2.2)
About half the time	0 (0.0)	0 (0.0)	0 (0.0)
Most of the time	0 (0.0)	0 (0.0)	0 (0.0)
Always	0 (0.0)	0 (0.0)	0 (0.0)
Other than marijuana, cigarettes and alcohol, have you ever used anything else/any other drug to make you "high"?			
No	33 (100)	56 (100)	89 (100)
Yes	0 (0.0)	0 (0.0)	0 (0.0)
How much peer pressure is there on people your age to smoke this drug?			
None	32 (97)	55 (98.2)	87 (97.8)
A little	0 (0.0)	1 (1.8)	1 (1.1)
A moderate amount	0 (0.0)	0 (0.0)	0 (0.0)
A lot	0 (0.0)	0 (0.0)	0 (0.0)
A great deal	1 (3.0)	0 (0.0)	1 (1.1)
How often do you feel peer pressure to smoke this drug?			
Never	33 (100)	54 (96.4)	87 (97.8)
Sometimes	0 (0.0)	2 (3.6)	2 (2.2)
About half the time	0 (0.0)	0 (0.0)	0 (0.0)
Most of the time	0 (0.0)	0 (0.0)	0 (0.0)
Always	0 (0.0)	0 (0.0)	0 (0.0)
Of your closest friends, how many smoke this drug?			
None	33 (100)	53 (94.6)	86 (96.6)
Less than half	0 (0.0)	2 (3.6)	2 (2.2)
About half	0 (0.0)	1 (1.8)	1 (1.1)
More than half	0 (0.0)	0 (0.0)	0 (0.0)
All	0 (0.0)	0 (0.0)	0 (0.0)

Sexual Behaviors

Respondents' sexual risk behaviors were assessed using items tested in our previous Suubi studies in Uganda [31, 39-43]. Respondents were asked several questions regarding their romantic relationships and history of sexual activity. Specifically, respondents were asked what the most appropriate age to have a romantic partner, boy/girlfriend was. Ages ranged between 14 to 50 (mean= 22.7 years), with 22.5% (n=20) of respondents reporting 20 years, and 20.2% (n=18)

reporting 18 years. None of the respondents reported that they had ever kissed someone in a romantic way. In addition, respondents were asked about the most appropriate age for one to willingly choose to have sex. Ages ranged from 14 to 45, with 21.3% (n=19) of respondents reporting 20 years, and 20.2% (n=18) reporting 18 years.

Only 1 respondent reported that she had engaged in sexual intercourse and her first sexual encounter was at 10 years old or younger. When asked about the number of sexual partners, she reported one person over her lifetime, and she had this sexual encounter willingly, and no protection or birth control method was used during this encounter.

The majority of respondents 75.3% (n=67) thought that none of their closest friends ever had sex, and 19% (n=17) did not know.

Pressure to Engage in Sexual Behaviors

Respondents were asked to report on their experience of peer and parent pressure to engage in sexual behaviors (Table 17.4). Of the total 89 respondents, 96.6% (n=86) reported no pressure at all to have sex, 95.5% (n=85) reported not experiencing peer pressure to have a romantic partner, and only 1 respondent reported experiencing pressure “*most of the time*” from the guardian to get married.

Table 17.4. Pressure to Engage in Sexual Behaviors (N=89)

Statement	Male (n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
How much peer pressure is there on people your age to have sex?			
None	33 (100.0)	53 (94.6)	86 (96.6)
A little	0 (0.0)	1 (1.8)	1 (1.1)
A moderate amount	0 (0.0)	0 (0.0)	0 (0.0)
A lot	0 (0.0)	1 (1.8)	1 (1.1)
A great deal	0 (0.0)	1 (1.8)	1 (1.1)
How often do you feel peer pressure to have a boyfriend/girlfriend?			
Never	32 (97.0)	53 (94.6)	85 (95.5)
Sometimes	0 (0.0)	2 (3.6)	2 (2.2)
About half the time	0 (0.0)	0 (0.0)	0 (0.0)
Most of the time	1 (3.0)	1 (1.8)	2 (2.2)
Always	0 (0.0)	0 (0.0)	0 (0.0)

How often does your guardian/ parent pressure you to get married?			
Never	33 (100.0)	55 (98.2)	88 (98.9)
Sometimes	0 (0.0)	0 (0.0)	0 (0.0)
About half the time	0 (0.0)	0 (0.0)	0 (0.0)
Most of the time	0 (0.0)	1 (1.8)	1 (1.1)
Always	0 (0.0)	0 (0.0)	0 (0.0)

Sexual Risk-Taking Intentions

Intentions to have sex were assessed by asking respondents to rate how several sexual-activity related statements applied to them. Items were rated on a 5-point Likert scale, with *1=never*, *2=sometimes*, *3=about half of the time*, *4=most of the time* and *5=always*. The theoretical range for this scale is 5-25, with higher scores indicating high intentions to engage in sexual risk-taking behaviors.

Table 17.5 presents the mean scores and standard deviations for each item and the overall mean score of the scale. The overall mean score was 6.1 (SD = 2.3; actual range 5-16). Individual responses are presented in Table A.21 of the Appendix.

Table 17.5. Sexual Risk-Taking Intentions (N=89)

Statement	Mean (SD)
I believe it's ok for people of my age to have sex with someone they've just met.	1.3 (0.9)
I believe it's OK for people my age to have sex with someone they love.	1.2 (0.8)
I believe it's OK for people to have sex before marriage.	1.3 (0.7)
I agree that it's OK to force one's girlfriend/boyfriend to have sex even when they don't want to.	1.2 (0.5)
I believe it's OK to have sex without protection with someone you know.	1.1 (0.6)
Total mean score	6.1 (2.3)
Range	5-16

18. CONCLUSION

This report presented baseline survey data on the 89 adolescents enrolled in the Suubi4Stigma study, prior to G-CBT and MFG interventions. The report provides a detailed understanding of participants in the following key areas: demographics, community background and satisfaction, family background and functioning, social support, educational outcomes and plans, poverty, physical and mental health, HIV stigma and shame, HIV knowledge and prevention attitudes, adherence to medication, and youth risk behaviors. These baseline data acts as benchmarks from which change will be measured, at 3 and 6-follow-up between the usual care and treatment conditions. Given that data was self-recorded, social desirability is a potential limitation. Overall, the baseline survey data illustrates how adolescents currently view themselves, their families, their communities, and their futures.

19. APPENDIX: EXTENDED TABLES

Table A.1. Community Satisfaction (N=89)

Statement	Never <i>n (%)</i>	Sometimes <i>n (%)</i>	About half the time <i>n (%)</i>	Most of the time <i>n (%)</i>	Always <i>n (%)</i>
I like where I live.	7 (7.9)	14 (15.7)	15 (16.9)	20 (22.5)	33 (37.1)
I wish I lived in a different house.	53 (59.6)	20 (22.5)	1 (1.1)	7 (7.9)	8 (9.0)
I wish I lived in another village.	44 (49.4)	25 (28.1)	6 (6.7)	8 (9.0)	6 (6.7)
I like my village.	8 (9.0)	16 (18.0)	16 (18)	18 (20.2)	31 (34.8)
I like my neighbors.	3 (3.4)	23 (25.8)	18 (20.2)	22 (24.7)	23 (25.8)
This town or village is filled with not nice people.	48 (53.9)	18 (20.2)	7 (7.9)	9 (10.1)	7 (7.9)
My family's house is nice.	12 (13.5)	15 (16.9)	14 (15.7)	18 (20.2)	30 (33.7)
There are a lot of fun things to do where I live.	7 (7.9)	30 (33.7)	16 (18.0)	16 (18)	20 (22.5)

Table A.2. Family Cohesion Scale (N=89)

Statement	Never <i>n (%)</i>	Sometimes <i>n (%)</i>	About half the time <i>n (%)</i>	Most of the time <i>n (%)</i>	Always <i>n (%)</i>
Do your family members ask each other for help before asking nonfamily members for help	10 (11.2)	20 (22.5)	9 (10.1)	21 (23.6)	29 (32.6)
Do your family members like to spend free time with each other	6 (6.7)	11 (12.4)	18 (20.2)	20 (22.5)	34 (38.2)
Do your family members feel close to each other	12 (13.5)	16 (18)	12 (13.5)	21 (23.6)	28 (31.5)
Are you available when others in the family want to talk to you?	8 (9.0)	24 (27.0)	6 (6.7)	23 (25.8)	28 (31.5)
Do you listen to what other family members have to say, even when you disagree	11 (12.4)	22 (24.7)	10 (11.2)	21 (23.6)	25 (28.1)
Do you do things together as a family	4 (4.5)	16 (18)	19 (21.3)	21 (23.6)	29 (32.6)
Do you think that your family members love you	2 (2.2)	9 (10.1)	18 (20.2)	22 (24.7)	38 (42.7)

Table A.3. Family Care and Relationships (N=89)

Statement	Never <i>n</i> (%)	Sometimes <i>n</i> (%)	About half the time <i>n</i> (%)	Most of the time <i>n</i> (%)	Always <i>n</i> (%)
Do your parent(s)/ guardian(s) take time to listen to you when you want to talk to them	0 (0.0)	22 (24.7)	14 (15.7)	26 (29.2)	27 (30.3)
If you have a problem, how often do your parent(s) /guardian(s) offer to help	1 (1.1)	17 (19.1)	15 (16.9)	24 (27)	32 (36)
Over the past 3 months, how often have you gone without enough food to eat	65 (73)	11 (12.4)	4 (4.5)	6 (6.7)	3 (3.4)
Over the past 3 months, how often have you gone without enough clean water	68 (76.4)	8 (9.0)	5 (5.6)	6 (6.7)	2 (2.2)
Over the past 3 months, how often have you gone without medicine when you are sick	74 (83.1)	4 (4.5)	3 (3.4)	5 (5.6)	3 (3.4)
Over the past 3 months, how often have you gone without school expenses, for example: fees, uniforms or books? *	41 (46.1)	24 (27.0)	5 (5.6)	11 (12.4)	5 (5.6)

*Not applicable for those not in school at baseline (n=3)

Table A.4. Frequency of Conversations with Caregiver (N=89)

Topic	Never <i>n</i> (%)	Sometimes <i>n</i> (%)	About half the time <i>n</i> (%)	Most of the time <i>n</i> (%)	Always <i>n</i> (%)
Alcohol/Drinking	69 (77.5)	10 (11.2)	1 (1.1)	4 (4.5)	5 (5.6)
Cigarette Smoking	76 (85.4)	4 (4.5)	1 (1.1)	4 (4.5)	4 (4.5)
HIV or AIDS	19 (21.3)	28 (31.5)	11 (12.4)	14 (15.7)	17 (19.1)
Sexually transmitted diseases	68 (76.4)	7 (7.9)	3 (3.4)	7 (7.9)	4 (4.5)
Having sex	71 (79.8)	4 (4.5)	5 (5.6)	5 (5.6)	4 (4.5)
Bad friends	62 (69.7)	15 (16.9)	2 (2.2)	7 (7.9)	3 (3.4)
Your education*	7 (7.9)	23 (25.8)	15 (16.9)	17 (19.1)	24 (27.0)
Puberty	46 (51.7)	20 (22.5)	3 (3.4)	9 (10.1)	11 (12.4)
What you will do to earn a living in the future	26 (29.2)	18 (20.2)	8 (9)	15 (16.9)	22 (24.7)
How to avoid getting pregnant or getting others pregnant	64 (71.9)	10 (11.2)	1 (1.1)	6 (6.7)	8 (9.0)
Marriage	76 (85.4)	6 (6.7)	2 (2.2)	3 (3.4)	2 (2.2)

*Not applicable for those not in school at baseline (n=3)

Table A.5. Level of Comfort Discussing Topics with Caregiver (N=89)

Topic	Very Uncomfortable <i>n</i> (%)	Somewhat Uncomfortable <i>n</i> (%)	Somewhat Comfortable <i>n</i> (%)	Very Comfortable <i>n</i> (%)
Alcohol/Drinking	48 (53.9)	24 (27.0)	8 (9.0)	9 (10.1)
Cigarette Smoking	50 (56.2)	27 (30.3)	4 (4.5)	8 (9.0)
HIV or AIDS	23 (25.8)	13 (14.6)	33 (37.1)	20 (22.5)
Having sex	41 (46.1)	27 (30.3)	16 (18.0)	5 (5.6)
Sexually transmitted diseases	44 (49.4)	22 (24.7)	12 (13.5)	11 (12.4)
Bad friends	36 (40.4)	23 (25.8)	18 (20.2)	12 (13.5)
Your education*	0 (0.0)	1 (1.1)	17 (19.1)	68 (76.4)
Puberty	23 (25.8)	17 (19.1)	31 (34.8)	18 (20.2)
What you will do to earn a living in the future	4 (4.5)	3 (3.4)	34 (38.2)	48 (53.9)
How to avoid getting pregnant or getting others pregnant	41 (46.1)	21 (23.6)	12 (13.5)	15 (16.9)
Marriage	38 (42.7)	19 (21.3)	21 (23.6)	11 (12.4)

*Not applicable for those not in school at baseline (n=3)

Table A.6. Perceived Caregiver Support (N=89)

Statement	Never <i>n</i> (%)	Sometimes <i>n</i> (%)	About half the time <i>n</i> (%)	Most of the time <i>n</i> (%)	Always <i>n</i> (%)
Can you count on your current parent(s)/guardian(s) to help you out, if you have a problem	2 (2.2)	17 (19.1)	11 (12.4)	29 (32.6)	30 (33.7)
Do your current parent(s)/guardian(s) say that you shouldn't argue with adults	18 (20.2)	18 (20.2)	9 (10.1)	22 (24.7)	22 (24.7)
Do your current parent(s)/guardian(s) keep challenging you to do your best in whatever you do	8 (9.0)	10 (11.2)	13 (14.6)	27 (30.3)	31 (34.8)
Do your current parent(s)/guardian(s) say that you should give in on arguments rather than make people angry	21 (23.6)	23 (25.8)	7 (7.9)	16 (18.0)	22 (24.7)
Do your current parent(s)/guardian(s) keep challenging you to think independently	47 (52.8)	21 (23.6)	5 (5.6)	6 (6.7)	10 (11.2)
Do your current parent(s)/guardian(s) show interest in your work (whatever you do)	6 (6.7)	24 (27.0)	9 (10.1)	25 (28.1)	25 (28.1)
Do your current parent(s)/guardian(s) show interest in your homework*	7 (7.9)	20 (22.5)	11 (12.4)	24 (27.0)	24 (27.0)
Do your current parent(s)/guardian(s) tell you that their ideas are correct and that you should not question them	27 (30.3)	28 (31.5)	9 (10.1)	12 (13.5)	13 (14.6)

When your current parent(s)/guardian(s) wants you to do something, do they explain why	22 (24.7)	28 (31.5)	7 (7.9)	17 (19.1)	15 (16.9)
Whenever you argue with your current parent(s)/guardian(s), do they say things like, "You'll know better when you grow up"?	28 (31.5)	27 (30.3)	3 (3.4)	14 (15.7)	17 (19.1)
Do your current parent(s)/guardian(s) let you make your own plans for things you want to do	29 (32.6)	21 (23.6)	7 (7.9)	19 (21.3)	13 (14.6)
Do your current parent(s)/guardian(s) know who your friends are	14 (15.7)	23 (25.8)	11 (12.4)	20 (22.5)	21 (23.6)
Do your current parent(s)/guardian(s) act cold and unfriendly if you do something they don't like	21 (23.6)	22 (24.7)	10 (11.2)	17 (19.1)	19 (21.3)
Do your current parent(s)/guardian(s) spend time just talking with you	9 (10.1)	25 (28.1)	9 (10.1)	21 (23.6)	25 (28.1)
When you make a mistake, do your current parent(s)/guardian(s) make you feel bad about it?	41 (46.1)	22 (24.7)	7 (7.9)	6 (6.7)	13 (14.6)
Do your current parent(s)/guardian(s) do things for fun together as a family	6 (6.7)	28 (31.5)	9 (10.1)	19 (21.3)	27 (30.3)
Do your current parent(s)/guardian(s) stop you from doing things with them when you do something they don't like?	52 (58.4)	19 (21.3)	2 (2.2)	7 (7.9)	9 (10.1)
*Not applicable for those not in school at baseline (n=3)					

Table A.7. Friendship Qualities Scale (N=89)

Statement	Strongly Disagree <i>n (%)</i>	Disagree <i>n (%)</i>	Neither Agree or Disagree <i>n (%)</i>	Agree <i>n (%)</i>	Strongly Agree <i>n (%)</i>
Safety subscale					
I believe all the information given by my friends.	21 (23.6)	6 (6.7)	6 (6.7)	30 (33.7)	26 (29.2)
My friends never break a promise.	26 (29.2)	18 (20.2)	2 (2.2)	21 (23.6)	22 (24.7)
I am confident that my friends will not leak my secret.	20 (22.5)	10 (11.2)	0 (0.0)	32 (36.0)	27 (30.3)
My friends never lie to me	26 (29.2)	17 (19.1)	3 (3.4)	22 (24.7)	21 (23.6)
I always listen to my friends' advice.	12 (13.5)	8 (9.0)	3 (3.4)	36 (40.4)	30 (33.7)
I feel safe when the precious belongings are kept by my friends.	22 (24.7)	15 (16.9)	2 (2.2)	20 (22.5)	30 (33.7)

I inform my friends immediately if he or she encounters problems in school. *	9 (10.1)	6 (6.7)	2 (2.2)	37 (41.6)	32 (36.0)
I feel safe when accompanied by my friends.	11 (12.4)	6 (6.7)	2 (2.2)	24 (27.0)	46 (51.7)
Closeness Subscale					
I always joke with my friends.	13 (14.6)	5 (5.6)	2 (2.2)	25 (28.1)	44 (49.4)
I understand my friends' mood.	18 (20.2)	9 (10.1)	5 (5.6)	26 (29.2)	31 (34.8)
I always chat with my friends even if we are from different classes. *	8 (9.0)	3 (3.4)	5 (5.6)	27 (30.3)	43 (48.3)
My friends and I always share our life experiences.	13 (14.6)	9 (10.1)	2 (2.2)	26 (29.2)	39 (43.8)
I understand the background of my friends.	18 (20.2)	11 (12.4)	2 (2.2)	25 (28.1)	33 (37.1)
I would not feel shy when performing something humorous in front of my friends.	10 (11.2)	8 (9.0)	4 (4.5)	22 (24.7)	45 (50.6)
Acceptance Subscale					
My friends forgive me easily.	10 (11.2)	4 (4.5)	1 (1.1)	32 (36.0)	42 (47.2)
My friends and I can overcome differences in our opinion immediately.	13 (14.6)	7 (7.9)	1 (1.1)	38 (42.7)	30 (33.7)
My friends treat me well.	8 (9.0)	3 (3.4)	3 (3.4)	31 (34.8)	44 (49.4)
My relationships with my friends are like brothers and sisters.	7 (7.9)	6 (6.7)	3 (3.4)	30 (33.7)	43 (48.3)
Help Subscale					
My friends correct my mistakes in my homework. *	8 (9.0)	7 (7.9)	2 (2.2)	24 (27.0)	45 (50.6)
My friends always help me when I have problems in completing my homework. *	5 (5.6)	2 (2.2)	2 (2.2)	33 (37.1)	44 (49.4)
My friends help me to solve problems.	9 (10.1)	9 (10.1)	2 (2.2)	29 (32.6)	40 (44.9)

*Not applicable for those not in school at baseline (n=3)

Table A.8. School Satisfaction Scale (N=86) *

Statement	Never n (%)	Sometimes n (%)	About half the time n (%)	Most of the time n (%)	Always n (%)
I look forward to going to school each day	1 (1.1)	6 (6.7)	13 (14.6)	27 (30.3)	39 (43.8)
I like being in school	0 (0.0)	14 (15.7)	9 (10.1)	29 (32.6)	34 (38.2)
School is interesting	1 (1.1)	17 (19.1)	14 (15.7)	20 (22.5)	34 (38.2)
I wish I didn't have to go to school.	59 (66.3)	13 (14.6)	5 (5.6)	3 (3.4)	6 (6.7)
There are many things about school I don't like.	44 (49.4)	29 (32.6)	3 (3.4)	7 (7.9)	3 (3.4)
I enjoy school activities	9 (10.1)	19 (21.3)	15 (16.9)	22 (24.7)	21 (23.6)

I learn a lot at school	3 (3.4)	16 (18)	12 (13.5)	24 (27.0)	31 (34.8)
I feel bad at school	65 (73.0)	12 (13.5)	4 (4.5)	2 (2.2)	3 (3.4)

*Not applicable for those not in school at baseline (n=3)

Table A.9. Pediatric Quality of Life Inventory (N=86) *

Statement	Never n (%)	Sometimes n (%)	About half the time n (%)	Most of the time n (%)	Always n (%)
It is hard for me to pay attention in class	46 (51.7)	15 (16.9)	7 (7.9)	6 (6.7)	12 (13.5)
I am forgetful.	41 (46.1)	33 (37.1)	2 (2.2)	5 (5.6)	5 (5.6)
I miss school because of not feeling well	34 (38.2)	33 (37.1)	6 (6.7)	7 (7.9)	6 (6.7)
I miss school to go to the doctor, clinics or hospital.	16 (18.0)	41 (46.1)	4 (4.5)	15 (16.9)	10 (11.2)

*Not applicable for those not in school at baseline (n=3)

Table A.10. Shame Questionnaire (N=89)

Statement	Not True n (%)	Somewhat True n (%)	Very True n (%)
I feel ashamed because I think that people can tell from looking at me that I have HIV.	57 (64.0)	15 (16.9)	17 (19.1)
I want to go away by myself and hide because I have HIV.	75 (84.3)	5 (5.6)	9 (10.1)
I am ashamed because I feel I am the only person with HIV in my school/village	68 (76.4)	12 (13.5)	9 (10.1)
Having HIV makes me feel dirty.	70 (78.7)	14 (15.7)	5 (5.6)
Because I have HIV, I feel like covering my body.	59 (66.3)	14 (15.7)	16 (18.0)
Because I have HIV, I wish I were invisible	63 (70.8)	18 (20.2)	8 (9.0)
Because I have HIV, I feel disgusted with myself	73 (82.0)	12 (13.5)	4 (4.5)
Because I have HIV, I feel exposed.	72 (80.9)	11 (12.4)	6 (6.7)

Table A.11. Stigma by Association Scale (N=89)

Statement	Not at all n (%)	Sometimes n (%)	All the time n (%)
I've been teased	66 (74.2)	15 (16.9)	8 (9.0)
I've been treated badly.	57 (64.0)	26 (29.2)	6 (6.7)
I've been gossiped about	59 (66.3)	19 (21.3)	11 (12.4)
I feel different or alone.	53 (59.6)	29 (32.6)	7 (7.9)
I worry about rejection.	60 (67.4)	20 (22.5)	9 (10.1)
I avoid making new friends	57 (64.0)	18 (20.2)	14 (15.7)
People are afraid of me	67 (75.3)	12 (13.5)	10 (11.2)

People think I am a bad person.	68 (76.4)	13 (14.6)	8 (9.0)
People avoid touching me	71 (79.8)	12 (13.5)	6 (6.7)
Parents who know don't want me around their kids	69 (77.5)	14 (15.7)	6 (6.7)

Table A.12 HIV Stigma Measure (N=89)

Statement	Strongly Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)
In many areas of my life, no one knows I have HIV.	29 (32.6)	9 (10.1)	14 (15.7)	37 (41.6)
I feel guilty because I have HIV.	46 (51.7)	12 (13.5)	8 (9.0)	23 (25.8)
People's attitudes make me feel worse about myself.	46 (51.7)	16 (18.0)	7 (7.9)	20 (22.5)
Telling someone I have HIV is risky	43 (48.3)	18 (20.2)	10 (11.2)	18 (20.2)
People with HIV lose jobs when employers learn about their HIV status.	40 (44.9)	19 (21.3)	13 (14.6)	17 (19.1)
I work hard to keep my HIV status a secret	13 (14.6)	5 (5.6)	19 (21.3)	52 (58.4)
I feel I'm not as good as others because I have HIV	49 (55.1)	22 (24.7)	4 (4.5)	14 (15.7)
I never feel ashamed of having HIV	23 (25.8)	17 (19.1)	15 (16.9)	34 (38.2)
People with HIV are treated like outcasts	50 (56.2)	17 (19.1)	7 (7.9)	15 (16.9)
Most people believe a person who has HIV is dirty	56 (62.9)	16 (18.0)	5 (5.6)	12 (13.5)
It is easier to avoid friendships than to worry about telling people about my HIV status.	39 (43.8)	20 (22.5)	10 (11.2)	20 (22.5)
Having HIV makes me feel unclean	58 (65.2)	16 (18.0)	3 (3.4)	12 (13.5)
I feel set apart, isolated from the rest of the world	51 (57.3)	19 (21.3)	4 (4.5)	15 (16.9)
Most people think a person with HIV is disgusting.	54 (60.7)	19 (21.3)	3 (3.4)	13 (14.6)
Having HIV makes me feel I'm a bad person	56 (62.9)	21 (23.6)	3 (3.4)	9 (10.1)
Most people with HIV are rejected when others learn about their status	36 (40.4)	22 (24.7)	11 (12.4)	20 (22.5)
I am very careful with whom I tell that I have HIV	35 (39.3)	14 (15.7)	10 (11.2)	30 (33.7)
Some people who know about my HIV status have grown more distant	47 (52.8)	20 (22.5)	4 (4.5)	18 (20.2)
I worry about people discriminating against me	46 (51.7)	23 (25.8)	7 (7.9)	13 (14.6)
Most people are uncomfortable around someone with HIV	44 (49.4)	19 (21.3)	12 (13.5)	14 (15.7)
I never feel I have to hide the fact that I have HIV.	39 (43.8)	18 (20.2)	15 (16.9)	17 (19.1)
I worry that people may judge me when they learn about my HIV status.	50 (56.2)	25 (28.1)	6 (6.7)	8 (9.0)
Having HIV in my body is disgusting to me	52 (58.4)	23 (25.8)	4 (4.5)	10 (11.2)
I am hurt by how people react when they learn I have HIV.	39 (43.8)	22 (24.7)	12 (13.5)	16 (18.0)

I worry people who know I have HIV will tell others	45 (50.6)	19 (21.3)	5 (5.6)	20 (22.5)
I regret having told some people that I have HIV	43 (48.3)	27 (30.3)	7 (7.9)	12 (13.5)
As a rule, telling others has been a mistake	45 (50.6)	16 (18.0)	10 (11.2)	18 (20.2)
People avoid touching me if they know I have HIV.	46 (51.7)	24 (27.0)	4 (4.5)	15 (16.9)
People I care about stopped calling me after learning that I have HIV	50 (56.2)	18 (20.2)	7 (7.9)	14 (15.7)
Some people have told me that HIV is what I deserved for how I lived.	55 (61.8)	21 (23.6)	4 (4.5)	9 (10.1)
Some people fear that they'll be rejected because of my HIV	46 (51.7)	19 (21.3)	9 (10.1)	15 (16.9)
People don't want me around their children once they know I have HIV	42 (47.2)	25 (28.1)	10 (11.2)	12 (13.5)
People have physically backed away from me when they know I have HIV	43 (48.3)	22 (24.7)	10 (11.2)	14 (15.7)
Some people act as though it's my fault I have HIV.	42 (47.2)	25 (28.1)	6 (6.7)	16 (18.0)
Some people with HIV stopped socializing with others due to their reactions to them	36 (40.4)	24 (27.0)	8 (9.0)	21 (23.6)
I have lost friends by telling them I have HIV	48 (53.9)	21 (23.6)	6 (6.7)	14 (15.7)
I have told people close to me to keep my HIV secret.	34 (38.2)	16 (18.0)	20 (22.5)	19 (21.3)
People who know tend to ignore my good points	39 (43.8)	17 (19.1)	12 (13.5)	21 (23.6)
People seem afraid of me because I have HIV	47 (52.8)	26 (29.2)	5 (5.6)	11 (12.4)
Knowing, they look for flaws in your character	44 (49.4)	22 (24.7)	9 (10.1)	14 (15.7)

Table A.13. HIV Internalized and Anticipated Stigma (N=89)

Statement	Strongly Disagree n (%)	Disagree n (%)	Agree n (%)	Strongly Agree n (%)
When people know I have HIV I feel uncomfortable around them.	47 (52.8)	22 (24.7)	7 (7.9)	13 (14.6)
Although I have HIV, I am a person of worth.	17 (19.1)	7 (7.9)	17 (19.1)	48 (53.9)
I am embarrassed about having HIV.	50 (56.2)	12 (13.5)	8 (9.0)	19 (21.3)
I feel guilty about having HIV.	45 (50.6)	19 (21.3)	10 (11.2)	15 (16.9)
I understand why people would reject my friendship because I have HIV.	45 (50.6)	24 (27.0)	4 (4.5)	16 (18.0)
I think less of myself because I have HIV.	53 (59.6)	12 (13.5)	11 (12.4)	13 (14.6)
Having HIV affects whether people want to be friends with you	49 (55.1)	14 (15.7)	7 (7.9)	19 (21.3)
Having HIV affects whether people like you or not	48 (53.9)	17 (19.1)	9 (10.1)	15 (16.9)
Having HIV affects whether or not you are asked to go out on dates or go to a party	50 (56.2)	23 (25.8)	7 (7.9)	9 (10.1)

Table A.14. Child Depression Inventory (N=89)

Statement	Male(n=33) n (%)	Female (n=56) n (%)	Total (N=89) n (%)
I am sad once in a while	27 (81.8)	32 (57.1)	59 (66.3)
I am sad many times	1 (3.0)	11 (19.6)	12 (13.5)
I am sad all the time	5 (15.2)	13 (23.2)	18 (20.2)
Nothing will ever work out for me	2 (6.1)	8 (14.3)	10 (11.2)
I am not sure if things will work out for me	4 (12.1)	14 (25)	18 (20.2)
Things will work out for me OK	27 (81.8)	34 (60.7)	61 (68.5)
I do most things OK	28 (84.8)	44 (78.6)	72 (80.9)
I do many things wrong	3 (9.1)	11 (19.6)	14 (15.7)
I do everything wrong	2 (6.1)	1 (1.8)	3 (3.4)
I hate myself	3 (9.1)	3 (5.4)	6 (6.7)
I do not like myself	1 (3.0)	1 (1.8)	2 (2.2)
I like myself	29 (87.9)	52 (92.9)	81 (91.0)
I do not think about killing myself	32 (97.0)	44 (78.6)	76 (85.4)
I think about killing myself but I would not do it	1 (3.0)	9 (16.1)	10 (11.2)
I want to kill myself	0 (0.0)	3 (5.4)	3 (3.4)
I feel like crying everyday	4 (12.1)	4 (7.1)	8 (9.0)
I feel like crying many days	0 (0.0)	5 (8.9)	5 (5.6)
I feel like crying once in a while	29 (87.9)	47 (83.9)	76 (85.4)
Things bother me all the time	0 (0.0)	3 (5.4)	3 (3.4)
Things bother me many times	3 (9.1)	4 (7.1)	7 (7.9)
Things bother me once in a while	30 (90.9)	49 (87.5)	79 (88.8)
I look OK	28 (84.8)	48 (85.7)	76 (85.4)
There are some bad things about my looks	2 (6.1)	3 (5.4)	5 (5.6)
I look ugly	3 (9.1)	5 (8.9)	8 (9.0)
I am tired once in a while	26 (78.8)	32 (57.1)	58 (65.2)
I am tired many days	4 (12.1)	15 (26.8)	19 (21.3)
I am tired all the time	3 (9.1)	9 (16.1)	12 (13.5)
Most days I do not feel like eating	2 (6.1)	5 (8.9)	7 (7.9)
Many days I do not feel like eating	3 (9.1)	10 (17.9)	13 (14.6)
I eat pretty well	28 (84.8)	41 (73.2)	69 (77.5)
I do not worry about aches and pains	15 (45.5)	12 (21.4)	27 (30.3)
I worry about aches and pains many times	7 (21.2)	17 (30.4)	24 (27.0)
I worry about aches and pains all the time	11 (33.3)	27 (48.2)	38 (42.7)

I do not feel alone	25 (75.8)	30 (53.6)	55 (61.8)
I feel alone many times	4 (12.1)	12 (21.4)	16 (18.0)
I feel alone all the time	4 (12.1)	14 (25.0)	18 (20.2)
I have plenty of friends	27 (81.8)	42 (75.0)	69 (77.5)
I have some friends, but I wish I had more	6 (18.2)	8 (14.3)	14 (15.7)
I do not have any friends	0 (0.0)	6 (10.7)	6 (6.7)
Nobody really loves me	0 (0.0)	3 (5.4)	3 (3.4)
I am not sure if anybody loves me	0 (0.0)	2 (3.6)	2 (2.2)
I am sure that somebody loves me	33 (100.0)	51 (91.1)	84 (94.4)

Table A. 15. Tennessee Self Concept Scale (TSCS)

Statement	Always False <i>n</i> (%)	Usually False <i>n</i> (%)	Sometimes True/ Sometimes False <i>n</i> (%)	Usually True <i>n</i> (%)	Always True <i>n</i> (%)
I like the way I look.	7 (7.9)	5 (5.6)	14 (15.7)	31 (34.8)	32 (36.0)
I have a happy family	7 (7.9)	3 (3.4)	11 (12.4)	28 (31.5)	40 (44.9)
I don't sleep well.	44 (49.4)	15 (16.9)	15 (16.9)	6 (6.7)	9 (10.1)
It's hard for me to do what's right	39 (43.8)	8 (9.0)	15 (16.9)	13 (14.6)	14 (15.7)
I know as much as the other children in my class. *	4 (4.5)	6 (6.7)	18 (20.2)	39 (43.8)	19 (21.3)
I'm happy with who I am.	7 (7.9)	7 (7.9)	17 (19.1)	28 (31.5)	30 (33.7)
I don't feel as well as I should	37 (41.6)	14 (15.7)	11 (12.4)	16 (18.0)	11 (12.4)
It's hard for me to be around other people	37 (41.6)	9 (10.1)	17 (19.1)	18 (20.2)	8 (9.0)
I don't do well in school, even when I try. *	28 (31.5)	30 (33.7)	19 (21.3)	9 (10.1)	28 (31.5)
I really care about my family	4 (4.5)	6 (6.7)	14 (15.7)	21 (23.6)	44 (49.4)
I'm as nice as I should be.	9 (10.1)	7 (7.9)	12 (13.5)	25 (28.1)	36 (40.4)
I don't feel happy when I'm with other people.	37 (41.6)	12 (13.5)	14 (15.7)	15 (16.9)	11 (12.4)
It's hard for someone to be my friend	40 (44.9)	12 (13.5)	13 (14.6)	15 (16.9)	9 (10.1)
My family doesn't trust me.	49 (55.1)	14 (15.7)	11 (12.4)	9 (10.1)	6 (6.7)
My teacher thinks I am smart. *	5 (5.6)	11 (12.4)	23 (25.8)	32 (36.0)	15 (16.9)
I get along well with other people.	8 (9.0)	6 (6.7)	7 (7.9)	24 (27.0)	44 (49.4)
I hate myself.	56 (62.9)	10 (11.2)	12 (13.5)	4 (4.5)	7 (7.9)
I'm not the person I would like to be	36 (40.4)	17 (19.1)	12 (13.5)	15 (16.9)	9 (10.1)
I'm an honest person.	6 (6.7)	3 (3.4)	14 (15.7)	17 (19.1)	49 (55.1)
I feel good most of the time.	5 (5.6)	4 (4.5)	11 (12.4)	23 (25.8)	46 (51.7)

*Not applicable for respondents not enrolled in school (n=3)

Table A.16. Beck Hopelessness Scale (BHS) (N=89)

Statement	False n (%)	True n (%)
I look forward to the future with hope and enthusiasm	9 (10.1)	80 (89.9)
I might as well give up because there is nothing I can do about making things better for myself.	57 (64.0)	32 (36.0)
When things are going badly. I am helped by knowing that they cannot stay that way forever.	32 (36.0)	57 (64.0)
I can't imagine what my life will be like in ten years' time	43 (48.3)	46 (51.7)
I have enough time to accomplish the things I want to do.	18 (20.2)	71 (79.8)
In the future, I expect to succeed in what concerns me most	10 (11.2)	79 (88.8)
My future seems dark.	62 (69.7)	27 (30.3)
I happen to be particularly lucky, and I expect to get more good things in life than the average person.	18 (20.2)	71 (79.8)
I just can't get breaks, and there is no reason I will in the future	47 (52.8)	42 (47.2)
My past experiences have prepared me well for the future.	19 (21.3)	70 (78.7)
All I can see ahead is unpleasant rather than pleasant	72 (80.9)	17 (19.1)
I don't expect to get what I really want.	63 (70.8)	26 (29.2)
When I look ahead to the future, I expect that I will be happier than I am now	15 (16.9)	74 (83.1)
Things just won't work out the way I want them to.	59 (66.3)	30 (33.7)
I have great faith in the future	16 (18.0)	73 (82.0)
I never get what I want, so it's foolish to want anything	50 (56.2)	39 (43.8)
It's very unlikely that I will get any real satisfaction in the future	43 (48.3)	46 (51.7)
The future seems vague and uncertain to me	58 (65.2)	31 (34.8)
I can look forward to more good times than bad times	23 (25.8)	66 (74.2)
There is no use in really trying to get anything I want because I probably won't get it.	61 (68.5)	28 (31.5)

Table A.17. Child PTSD Reaction Index (N=89)

Statement	None (Never) n (%)	Little (1-2 days a week) n (%)	Some (2- 3 days a week) n (%)	Much (2 days a month) n (%)	Most (almost every day) n (%)
I am on the lookout for danger or things that I am afraid of (like looking over my shoulder even when nothing is there).	48 (53.9)	9 (10.1)	18 (20.2)	6 (6.7)	8 (9.0)
I have thoughts like "I am bad."	55 (61.8)	16 (18.0)	9 (10.1)	4 (4.5)	5 (5.6)
I try to stay away from people, places, or things that remind me about what happened.	46 (51.7)	14 (15.7)	18 (20.2)	6 (6.7)	5 (5.6)
I get upset easily or get into arguments or physical fights.	62 (69.7)	10 (11.2)	11 (12.4)	4 (4.5)	2 (2.2)
I feel like I am back at the time when the bad thing happened, like it's happening all over again.	55 (61.8)	12 (13.5)	11 (12.4)	4 (4.5)	7 (7.9)
I feel like what happened was sickening or gross	50 (56.2)	12 (13.5)	15 (16.9)	3 (3.4)	9 (10.1)

I don't feel like doing things with my family or friends or other things that I liked to do	32 (36.0)	12 (13.5)	20 (22.5)	15 (16.9)	10 (11.2)
I have trouble concentrating or paying attention	40 (44.9)	8 (9.0)	15 (16.9)	14 (15.7)	12 (13.5)
I have thoughts like, "The world is really dangerous."	48 (53.9)	10 (11.2)	19 (21.3)	4 (4.5)	8 (9.0)
I have bad dreams about what happened, or other bad dreams.	48 (53.9)	13 (14.6)	11 (12.4)	9 (10.1)	8 (9.0)
When something reminds me of what happened I get very upset, afraid, or sad.	40 (44.9)	17 (19.1)	16 (18.0)	6 (6.7)	10 (11.2)
I have trouble feeling happiness or love	40 (44.9)	16 (18.0)	17 (19.1)	7 (7.9)	9 (10.1)
I try not to think about or have feelings about what happened.	39 (43.8)	19 (21.3)	15 (16.9)	8 (9.0)	8 (9.0)
When something reminds me of what happened, I have strong feelings in my body like my heart beats fast, my head aches or my stomach aches.	38 (42.7)	17 (19.1)	19 (21.3)	7 (7.9)	8 (9.0)
I am mad with someone for making the bad thing happen, not doing more to stop it, or to help after.	40 (44.9)	23 (25.8)	10 (11.2)	7 (7.9)	9 (10.1)
I have thoughts like "I will never be able to trust other people."	34 (38.2)	23 (25.8)	21 (23.6)	5 (5.6)	6 (6.7)
I feel alone even when I am around other people	44 (49.4)	16 (18)	14 (15.7)	7 (7.9)	8 (9.0)
I have upsetting thoughts, pictures or sounds of what happened come into my mind when I don't want them to.	50 (56.2)	9 (10.1)	13 (14.6)	9 (10.1)	8 (9.0)
I feel that part of what happened was my fault.	54 (60.7)	14 (15.7)	10 (11.2)	4 (4.5)	7 (7.9)
I hurt myself on purpose.	63 (70.8)	10 (11.2)	6 (6.7)	4 (4.5)	6 (6.7)
I have trouble going to sleep, wake up often, or have trouble getting back to sleep	50 (56.2)	12 (13.5)	12 (13.5)	7 (7.9)	8 (9.0)
I feel ashamed or embarrassed over what happened	53 (59.6)	14 (15.7)	13 (14.6)	2 (2.2)	7 (7.9)
I have trouble remembering important parts of what happened	53 (59.6)	17 (19.1)	6 (6.7)	3 (3.4)	10 (11.2)
I feel jumpy or startle easily, like when I hear a loud noise or when something surprises me.	42 (47.2)	14 (15.7)	19 (21.3)	9 (10.1)	5 (5.6)
I feel afraid or scared	48 (53.9)	17 (19.1)	12 (13.5)	5 (5.6)	7 (7.9)
I do risky or unsafe things that could really hurt me or someone else.	63 (70.8)	12 (13.5)	3 (3.4)	5 (5.6)	6 (6.7)
I want to get back at someone for what happened	61 (68.5)	12 (13.5)	7 (7.9)	2 (2.2)	7 (7.9)

I feel like I am seeing myself or what I am doing from outside my body (like watching myself in a movie).	44 (49.4)	16 (18)	11 (12.4)	6 (6.7)	12 (13.5)
I feel not connected to my body, like I'm not really there inside.	59 (66.3)	13 (14.6)	7 (7.9)	6 (6.7)	4 (4.5)
I feel like things around me look strange, different, or like I am in a fog	56 (62.9)	13 (14.6)	11 (12.4)	2 (2.2)	7 (7.9)
I feel like things around me are not real, like I am in a dream	56 (62.9)	14 (15.7)	12 (13.5)	1 (1.1)	6 (6.7)

Table A.18. UCLA Loneliness Scale (N=89)

Statement	Never <i>n (%)</i>	Rarely <i>n (%)</i>	Sometimes <i>n (%)</i>	Often <i>n (%)</i>
I am unhappy doing so many things alone	43 (48.3)	17 (19.1)	18 (20.2)	11 (12.4)
I have nobody to talk to.	48 (53.9)	14 (15.7)	16 (18)	11 (12.4)
I cannot tolerate being so alone	50 (56.2)	15 (16.9)	16 (18)	8 (9.0)
I lack companionship	60 (67.4)	11 (12.4)	8 (9.0)	10 (11.2)
I feel as if nobody really understands me.	56 (62.9)	14 (15.7)	11 (12.4)	8 (9.0)
I find myself waiting for people to call or write.	57 (64.0)	9 (10.1)	14 (15.7)	9 (10.1)
There is no one I can turn to	65 (73.0)	7 (7.9)	13 (14.6)	4 (4.5)
I am no longer close to anyone	53 (59.6)	13 (14.6)	16 (18)	7 (7.9)
My interests and ideas are not shared by those around me.	58 (65.2)	13 (14.6)	8 (9.0)	10 (11.2)
I feel left out	64 (71.9)	11 (12.4)	9 (10.1)	5 (5.6)
I feel completely alone	59 (66.3)	11 (12.4)	14 (15.7)	5 (5.6)
I am unable to reach out and communicate with those around me.	54 (60.7)	18 (20.2)	12 (13.5)	5 (5.6)
My social relationships are superficial	53 (59.6)	13 (14.6)	16 (18.0)	7 (7.9)
I feel starved for company.	43 (48.3)	16 (18.0)	20 (22.5)	10 (11.2)
No one really knows me well.	57 (64.0)	12 (13.5)	13 (14.6)	7 (7.9)
I feel isolated from others.	64 (71.9)	10 (11.2)	10 (11.2)	5 (5.6)
I am unhappy being so withdrawn.	67 (75.3)	7 (7.9)	11 (12.4)	4 (4.5)
It is difficult for me to make friends	58 (65.2)	13 (14.6)	13 (14.6)	5 (5.6)
I feel shut out and excluded by others	61 (68.5)	14 (15.7)	10 (11.2)	4 (4.5)
People are around me but not with me	64 (71.9)	12 (13.5)	8 (9.0)	5 (5.6)

Table A.19. HIV Status Disclosure Comfort (N=89)

Statement	Very Uncomfortable <i>n</i> (%)	Somewhat Uncomfortable <i>n</i> (%)	Somewhat Comfortable <i>n</i> (%)	Very Comfortable <i>n</i> (%)
How comfortable do you feel talking about your HIV status to other kids in school? *	36 (40.4)	21 (23.6)	23 (25.8)	6 (6.7)
How comfortable do you feel talking about your HIV status to your close friends?	37 (41.6)	25 (28.1)	19 (21.3)	8 (9.0)
How comfortable do you feel talking about your HIV status to family members who do not know?	30 (33.7)	12 (13.5)	32 (36.0)	15 (16.9)
How comfortable do you think you would feel talking about your HIV status to a girlfriend/boyfriend?	40 (44.9)	16 (18.0)	20 (22.5)	13 (14.6)

*Not applicable for respondents not enrolled in school (n=3)

Table A.20. Access to Medical Care (N=89)

Statement	Strongly Disagree <i>n</i> (%)	Somewhat Disagree <i>n</i> (%)	Uncertain <i>n</i> (%)	Somewhat Agree <i>n</i> (%)	Strongly Agree <i>n</i> (%)
If I need medical care, I can get admitted without any trouble	55 (61.8)	12 (13.5)	7 (7.9)	3 (3.4)	12 (13.5)
It is hard for me to get medical care in an emergency.	34 (38.2)	11 (12.4)	7 (7.9)	12 (13.5)	25 (28.1)
Sometimes I go without the medical care I need because it is too expensive.	18 (20.2)	15 (16.9)	7 (7.9)	12 (13.5)	37 (41.6)
I have easy access to the medical specialists that I need.	44 (49.4)	16 (18.0)	6 (6.7)	5 (5.6)	18 (20.2)
Places where I can get medical care are very conveniently located.	49 (55.1)	11 (12.4)	6 (6.7)	6 (6.7)	17 (19.1)
I am able to get medical care whenever I need it.	49 (55.1)	12 (13.5)	9 (10.1)	4 (4.5)	15 (16.9)

Table A.21. Sexual Risk-Taking Intentions (N=89)

Statement	Never <i>n (%)</i>	Sometimes <i>n (%)</i>	About half the time <i>n (%)</i>	Most of the time <i>n (%)</i>	Always <i>n (%)</i>
I believe it's ok for people of my age to have sex with someone they've just met.	78 (87.6)	6 (6.7)	0 (0.0)	1 (1.1)	4 (4.5)
I believe it's OK for people my age to have sex with someone they love.	80 (89.9)	3 (3.4)	3 (3.4)	0 (0.0)	3 (3.4)
I believe it's OK for people to have sex before marriage.	74 (83.1)	10 (11.2)	2 (2.2)	3 (3.4)	0 (0.0)
I agree that it's OK to force one's girlfriend/boyfriend to have sex even when they don't want to.	76 (85.4)	10 (11.2)	2 (2.2)	1 (1.1)	0 (0.0)
I believe it's OK to have sex without protection with someone you know.	84 (94.4)	2 (2.2)	1 (1.1)	1 (1.1)	1 (1.1)

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