

# An Online Library of Science-Based HIV Prevention Resources

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## Abstract

This paper introduces the online Sociometrics Social, Behavioral, and Health Sciences Library, an exciting new science-based resource for HIV/AIDS researchers, health educators, and clinicians. The over 400 products in the Sociometrics Library supplement the online publications—journal articles, books, reports, monographs—that have been the focus of scientific research libraries and publishers to date, both printed and online. Examples of the innovative science-based products that serve as the library's content include: Evidence-based interventions and programs (**EBIs/EBPs**) that evaluation research has shown to be effective in preventing HIV or its risky social and behavioral antecedents; primary research **data** and survey **instruments**; and interactive, multimedia **training tools and courses** to build HIV professionals' capacity to implement EBPs with fidelity and to cooperate with evaluators in the assessment of their effectiveness. A Scientist Expert Panel has guided and will continue to guide product selection and acquisition, ensuring the collection's continuing technical merit, research utility, and relevance for practice and policy. The Sociometrics Library aims to become the dominant online source of behavioral and social science-based HIV research by-products, operationally sustainable and able to stay up-to-date both from a technological and scientific perspective.

## Keywords

HIV, AIDS, STI, Data, Instruments, Effective Programs, Evidence-Based Programs, Capacity Building Tools, Researchers, HIV Educators, HIV Practitioners

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## 1. Introduction

Despite global efforts to address the AIDS epidemic, HIV infection remains a significant problem, particularly for low-resource countries and US minority populations who are disproportionately carrying the HIV burden [1] [2] [3]. AIDS and related illnesses are the leading cause of death among women ages 15 to 49 globally, and the second leading cause of death for young women ages 15 to 24 in Africa [4]. While AIDS-related deaths have declined in some regions of the world, including eastern and southern Africa and North America, AIDS-related mortality has increased over the past decade in the Middle East and North Africa by 48%, and in Eastern Europe and Central Asia by 38% [4].

The populations most profoundly affected by the HIV epidemic include specific racial and ethnic minority groups, gay or bisexual men who have sex with other men (MSM), sex workers, and injection drug users. In countries across the world, HIV prevalence among key subpopulations is often substantially higher than among the general population [4]. In the United States, MSM accounted for 67% of new HIV infections and 83% of new infections in males in 2016 [5]. Among racial and ethnic groups in the US, African American and Hispanic men and women continue to be at higher risk of contracting HIV and yet have lower access to testing, prevention, and healthcare [2] [3] [6]. According to the CDC, the US Centers for Disease Control and Prevention, African Americans and Hispanics represent 30% of the US population but accounted for 69% of new HIV infections in 2016 [5].

## Evidence-Based Resources for Reducing HIV Transmission

As a result, numerous programs and strategies have been developed across the globe to reduce HIV transmission and improve related outcomes [7] [8] [9] [10] [11]. Many such programs have been proven effective in changing behaviors, such as risky sexual or injection drug-related behaviors, that increase the probability of HIV transmission [12]-[17]. These effective programs are called evidence-based interventions (EBIs) or evidence-based programs (EBPs). Typically, EBPs not only inform participants with relevant knowledge and facts, but also teach new skills and give participants the opportunity to practice the skills with techniques like modeling, role-playing, and games.

Considerable research has demonstrated that select EBPs can decrease risky sexual and drug-use behaviors among populations heavily impacted by HIV/AIDS, including men who have sex with men [18] [19] [20]; injection drug users [21] [22]; young people [23]; and other high-risk populations. This is true in both high- and low-resource countries [24] [25] [26] [27] and across age groups such as youth and adults [28] [29] [30]. The success of EBPs in reducing HIV transmission among diverse populations, including high risk groups, has led organizations such as the CDC, NIH (the US National Institutes of Health), and WHO (the World Health Organization) to actively promote the use of EBPs [31] [32] [33] [34].

Many factors, however, continue to obstruct EBPs' wide dissemination and sustained implementation [33] [35] [36] [37] [38]. The most prominent barriers to EBP uptake and implementation are the lack of low-cost access to EBPs; the high cost and lack of availability of technical assistance; insufficient organizational capacity among community-based organizations implementing the EBPs; inadequate buy-in among staff; a lack of EBP fit with the personnel, money and time constraints of the organization; and limited knowledge about adaptation of EBPs to the local context [35] [38] [39]. Public health practitioners frequently report that they are stretched too thin. They are often expected to remain up-to-date on literature, seek out effective programs, perform program adaptations for their specific target audiences, and find other practitioners to share lessons learned from the field or exchange advice. Each step of the process requires a considerable time commitment from already busy health educators and providers, creating significant challenges.

Program adaptation to the local context can be a particularly weighty barrier, given the difficulty in determining how to adapt a program for new contexts while preserving the core components underlying the program's efficacy. However, program adaptation is itself an essential practice, as research has shown that programs must be tailored to appropriately address the cultural backgrounds, developmental levels, and community contexts of the target population [40] [41]. While adaptations are vital to an EBP's on going success, inappropriate modification of program components often reduces a program's efficacy and prevents it from changing behavior. Studies have shown that organizations frequently modify core program content [42] [43] [44]. Practitioners lack helpful, easily understood, science-based tools to help them apply the concepts of fidelity and flexibility to their work [45] [46]. Modifications are often made to adapt, alter or delete program content, scope, and/or delivery method to accommodate real-world circumstances such as time constraints, varying population or setting needs, or unavailability of organizational resources. Many such modifications are done without guidance for how the changes affect fidelity, core elements and desired outcomes [47] [48].

New tools and resources are required to bridge the gap between research and practice. There is a need not only for widespread identification and dissemination of EBPs, but also for tools and resources that support program fidelity, appropriate adaptation of EBPs to specific contexts, and program engagement.

Program evaluation is also of significance. Evaluation enables practitioners to understand why and in what areas their implementation of an EBP has succeeded or failed, the impact of each program component, and how to improve future implementations [49]. However, health practitioners often experience difficulty in evaluating their interventions because of factors such as a lack of research knowledge and training; difficulty developing questionnaires and other evaluation tools; lack of staff time to conduct evaluations; and low funding coupled with high evaluation costs [50] [51].

To address these challenges, Sociometrics Corporation has developed an on-line suite of research-based products and resources: the Sociometrics Social, Behavioral, and Health Sciences Library (<https://www.socio.com/>). This online library aims to address these challenges by expanding and updating the search for effective HIV prevention EBPs and HIV-related datasets; identifying EBPs that meet established effectiveness criteria; promoting easy dissemination and uptake of these EBPs across implementation settings, including low-resource regions; providing capacity-building tools that support program adaptation and fidelity; and enabling widespread evaluation of program efficacy by simplifying data collection, analysis, and sharing.

## **2. Methods**

### **2.1. Collection of Resources**

For over three decades, with funding from the NIH and CDC, Sociometrics has developed multiple topically-focused collections of evidence-based programs (EBPs), datasets, and capacity-building tools for health and public health professionals. Two of these collections—the HIV/AIDS Prevention Program Archive (HAPPA) and the Global HIV Archive (GHA)—contain EBPs that have been proven effective in reducing the sexual and drug-related behaviors that put one at risk of HIV/AIDS/STI transmission. The companion HIV/AIDS/STI Data Archive includes studies that provide descriptive and comparative data on the behavioral and social antecedents and consequences of HIV, AIDS, and sexually transmitted infections (STIs). Sociometrics has also developed capacity-building tools to aid in implementing, adapting, and evaluating EBPs.

#### **2.1.1. EBP and Data Collections**

Sociometrics' collections of EBPs and datasets were developed using a systematic process of identification (by Sociometrics staff), review and selection (by Scientist Expert Panels), acquisition (from the developer of the EBP or dataset) and processing for public use (by Sociometrics staff). A Scientist Expert Panel of four to six members was established for each topically-focused collection; panelists were researchers considered experts in the topic area. The Scientist Expert Panels developed resource selection criteria in conjunction with Sociometrics' staff of scientists. For EBPs, these criteria included the program's technical merit, replicability, and positive outcomes; the criteria for datasets included technical quality, substantive utility, relevance, and disciplinary balance. Candidate programs and datasets were then identified using extensive searches of relevant scientific literature, and briefing materials were prepared for each candidate resource. These briefing materials were provided to the Scientist Expert Panels, who assigned each resource a priority score for inclusion in Sociometrics' Library. Sociometrics contacted the developer(s), author(s), and/or investigator(s) of the selected programs or datasets to obtain permission to include the resource in the Sociometrics Library and to disseminate it for public use. Finally, obtained

resources were packaged in a user-friendly way to facilitate replication in a new setting. For EBPs, packaging included a user's guide containing the curriculum and describing the evidence for its effectiveness; as well as all facilitator, participant, and evaluation materials needed to faithfully replicate and evaluate the program in a new setting. For datasets, the packaging included a user's guide describing the dataset's sample, data collection methods, and included variables. The raw data and analytic SAS and SPSS program statements were included, as were documentation files such as instruments, codebooks, and frequencies.

### **2.1.2. Capacity-Building Tools**

To support the exemplary EBP and data collections, Sociometrics' scientists developed capacity-building tools and resources for ongoing education of HIV professionals. These tools aim to improve health practitioners' ability to implement EBPs with fidelity and cultural competence, evaluate them, and analyze the resulting data. Resources in the capacity-building collection include training modules focused on how to implement and evaluate specific EBPs; sexual health-related activities and exercises for use in middle and high school classrooms; behavioral skills training tools for developing and implementing culturally competent programs; and evaluation resource guides and tutorials.

## **3. Results**

### **3.1. Library Content**

As of this writing, the Sociometrics Social, Behavioral, and Health Sciences Library (<https://www.socio.com/>) consists of 90 evidence-based programs, 315 datasets, and 22 capacity-building tools for health professionals. HIV/AIDS is a significant focus of the Sociometrics Library: 65 evidence-based programs (**Table 1**), 29 datasets (**Table 2**), and 16 capacity-building tools (**Table 3**) are focused on HIV and HIV prevention. The collection continues to grow. For information on how to submit a science-based HIV dataset, EBP, or capacity-building tool to the Sociometrics Library, please go to <https://www.socio.com/submissions>.

#### **3.1.1. Evidence-Based HIV Prevention Programs**

**Table 1** details the HIV-related evidence-based programs (EBPs) in the online Sociometrics Library. A wide variety of programs are included, focused on different countries, target populations, theories of change, and prevention approaches. All of the HIV EBPs have demonstrated a positive impact on reducing sexual and/or injection drug-related behavior(s) that put an individual at risk for transmitting or getting HIV/AIDS. The EBPs are presented in lesson-by-lesson sequence, with all facilitator and participant materials for each session included in view- and/or download-format.

#### **3.1.2. Exemplary Datasets**

The Sociometrics Library's datasets address a variety of topics including the incidence and prevalence of specific sexual behaviors; contraceptive and STI-preventive

**Table 1.** Evidence-based programs (EBPs) in the Sociometrics Library with a topical focus on HIV/AIDS prevention.

PROGRAM NAME	TARGET POPULATION <sup>1</sup>	BRIEF PROGRAM DESCRIPTION <sup>2</sup>
<b>Global HIV EBPs</b>		
<a href="#">Community-based Directly Observed Therapy (C-DOT) Program</a>	HIV+ adults starting or who recently started HAART	Directly observed therapy to increase adherence to highly active antiretroviral therapy (HAART)
<a href="#">Entre Nous Jeunes</a>	Youth and young adults ages 10 - 25	A peer educator program to reduce STI/HIV and unintended pregnancies
<a href="#">HIV/AIDS Warriors Program</a>	Soldiers and other at-risk populations	A five-session HIV risk reduction program with monthly booster sessions
<a href="#">Intervention with Microfinance for AIDS and Gender Equity (IMAGE)</a>	Impoverished women	A ten-session gender and HIV training curriculum augmented by a microfinance program
<a href="#">mDOT Program: For Individuals Receiving Highly Active Antiretroviral Therapy (HAART)</a>	HIV+ adults starting or who recently started HAART	Peer-provided directly observed therapy and support to increase adherence to highly active antiretroviral therapy (HAART)
<a href="#">Mujer Segura, Healthy Woman</a>	Female sex workers ages 18+	A single session program to increase use of condoms
<a href="#">A Peer Education Program for Taxicab/Tricycle Drivers and Other Bridge Populations</a>	Transportation industry workers, other bridge populations	A peer educator program to reduce sexual risk behaviors among members of bridge populations who are at risk of spreading STIs/HIV
<a href="#">Voluntary Counseling and Testing for Female Sex Workers (VCT Program)</a>	Female sex workers ages 18+	Pre-test counseling, STI/HIV testing, and post-test counseling
<b>HIV EBPs for US Youth</b>		
<a href="#">A Clinic-Based AIDS Education Program for Female Adolescents</a>	Sexually active girls ages 13 - 21	A single-session group intervention on the transmission and prevention of HIV/AIDS
<a href="#">ABAN AYA Youth Project: 5<sup>th</sup> Grade, 6<sup>th</sup> Grade, 7<sup>th</sup> Grade, 8<sup>th</sup> Grade</a>	Youths in grades 5 - 8	An Afrocentric social development curriculum delivered over a four-year period
<a href="#">Adolescents Living Safely: AIDS Awareness, Attitudes and Actions</a>	Runaway youths 11 - 18 years	20 small group discussion sessions with case management and private counseling
<a href="#">Adolescents Living Safely: AIDS Awareness, Attitudes and Actions for Gay, Lesbian and Bisexual Teens</a>	LGBT youth ages 14 - 19	Provides education, social and medical services, and peer support through case management, comprehensive health care, and risk assessment counseling with small group discussion sessions
<a href="#">AIDS Prevention for Adolescents in School</a>	High school students	A six-session program to improve knowledge, beliefs, self-efficacy, and risk behaviors concerning HIV/AIDS
<a href="#">AIDS Risk Reduction Education and Skills Training Program (ARREST)</a>	Teens ages 12 - 16	A three-session small group program on reducing adolescent health-risk behaviors
<a href="#">AIDS Risk Reduction for College Students</a>	College students	Three sessions with information, motivation, and behavioral strategies for AIDS risk reduction
<a href="#">ASSESS for Adolescent Risk Reduction</a>	Adolescents ages 12 - 15	Provides tools to enhance risk-reduction communication from health care providers
<a href="#">CyberSenga</a>	Youth ages 13 - 18	A five-module online HIV prevention program
<a href="#">FOCUS: Preventing Sexually Transmitted Infections and Unwanted Pregnancies among Young Women</a>	Young women ages 16 - 22	A four-session group intervention addressing prevention of sexually transmitted infections (STIs) and unintended pregnancies
<a href="#">HORIZONS: STI/HIV Sexual Risk Reduction Intervention for African American Girls</a>	AA adolescent girls seeking sexual health services	A two-session STI/HIV sexual risk reduction program for small groups
<a href="#">Information-Motivation-Behavioral Skills HIV Prevention Program (IMB)</a>	High school students	A four-session classroom intervention to reduce high school students' risk of HIV infection
<a href="#">Keepin' It R.E.A.L.! A Mother-Adolescent HIV Prevention Program</a>	Adolescents ages 11 - 14 and their mothers	A seven-session social-cognitive HIV prevention intervention

**Continued**

<a href="#">Multimedia SiHLE</a>	AA adolescent girls	An interactive, computer-based intervention addressing HIV/AIDS and STI prevention needs
<a href="#">Prime Time: A Positive Youth Development Program</a>	Sexually active adolescent girls	An 18-month multicomponent program that seeks to reduce sexual risk behaviors, violence involvement, and school disconnection
<a href="#">Poder Latino: A Community AIDS Prevention Program for Inner-City Latino Youth</a>	HIS youth ages 14 - 20	A multifaceted community AIDS prevention program for high-risk inner-city youth
<a href="#">Queens Hospital Center's Teenage Program</a>	Pregnant adolescents	A clinic-based program providing medical care, psychosocial support, and education to the adolescent, her partner, and her family
<a href="#">Reach for Health: A School-Sponsored Community Youth Service Intervention for Middle School Students</a>	AA, HIS youth grades 5 - 8	A school-sponsored community youth service intervention for middle school students, combining a classroom teaching component with community service work
<a href="#">Reproductive Health Counseling for Young Men</a>	Boys ages 15 - 18	A one-hour, single-session, clinic-based intervention
<a href="#">Rikers Health Advocacy Program (RHAP)</a>	Incarcerated male adolescent drug users 16 - 18	Four one-hour small group sessions focusing on health education issues, particularly HIV/AIDS
<a href="#">Safer Sex Efficacy Workshop</a>	College students	A single three-hour session to increase self-efficacy to prevent HIV/AIDS and other STIs
<a href="#">Safer Sex Intervention</a>	Young women ages 13 - 23 with an STI	An individualized STI intervention program to reduce high-risk sexual behaviors
<a href="#">School-Linked Reproductive Health Services (The Self Center)</a>	Middle and high school students	A program combining education, counseling, and reproductive services
<a href="#">Sexual Health and Adolescent Risk Prevention (SHARP)</a>	Adolescents	An interactive single-session intervention targeting both substance use and sexual risk reduction
<a href="#">SiHLE: Health Workshops for Young Black Women</a>	AA adolescent girls	Health workshops addressing STI/HIV/AIDS prevention needs
<a href="#">Teen Health Project (THP): Community-Level HIV Prevention Intervention for Adolescents in Low Income Housing Development</a>	Adolescents in low income housing	A community-level HIV prevention intervention
<a href="#">Youth AIDS Prevention Project (YAPP)</a>	AA youth grades 5 - 8	STDs, HIV/AIDS, and substance abuse prevention among high-risk students
<a href="#">Youth and AIDS Project's HIV Prevention Program</a>	GB males ages 13 - 21	Provides education, peer support, counseling, and case management to males at high risk for HIV/AIDS
<b>HIV EBPs for US Adults</b>		
<a href="#">AIDS Prevention and Health Promotion among Women</a>	Women ages 16 - 29	A four-session group program on developing and following a sound sexual health plan
<a href="#">Brother to Brother</a>	AA, GB men	A three-session behavioral intervention aimed at reducing HIV infection
<a href="#">Doing Something Different</a>	Adults in their mid-20s to early 30s	A single session intervention to promote condom use in health clinics
<a href="#">Focus on the Future</a>	AA men living with STI/HIV	A safer sex intervention for recently diagnosed individuals
<a href="#">Holistic Health Recovery Program for Injection Drug Users (HHRP)</a>	HIV-negative adult injection drug users	A 12-session group therapy intervention for HIV prevention through behavioral change
<a href="#">Holistic Health Recovery Program for Injection Drug Users Living with HIV (HHRP+)</a>	HIV-positive adult injection drug users	A 12-session group therapy intervention for harm reduction and health promotion



**Continued**

<a href="#">HoMBReS: Hombres Manteniendo Bienestar y Relaciones Saludables (Men Maintaining Wellbeing and Healthy Relationships)</a>	Latino men ages 18 - 71	A community-based, behavioral intervention that aims to increase condom use and HIV testing
<a href="#">Hot, Healthy, and Keeping it Up!</a>	API, GB men	A three-hour, single session, culturally appropriate intervention
<a href="#">Let's Chat</a>	Adults with chronic mental illness	A four-session intervention addressing risk reduction and AIDS prevention
<a href="#">Multimedia WiLLOW: HIV Transmission Reduction Among African American Women Living with HIV</a>	AA women living with HIV	An interactive computer-based HIV transmission reduction intervention
<a href="#">Optimizing Partner Notification (OPeN)</a>	Adults with an STI, especially urban, minority populations	A clinic-based patient-centered program, promotes STI partner notification
<a href="#">Point for Point</a>	Injection drug users	A needle exchange intervention designed for implementation in street settings
<a href="#">Portland Women's Health Program</a>	Recently incarcerated women	A program of 10 one-on-one sessions with a trained health specialist to reduce HIV risk behaviors and increase life stability
<a href="#">Project SAFE (P-SAFE)</a>	HIS women	A computer-delivered HIV/STI prevention program with videos of individual women speaking candidly about HIV/STI-related topics, skills instruction, and role-play
<a href="#">Project SAFE: Sexual Awareness For Everyone An Intervention to Prevent STDs Among Minority Women</a>	AA, HIS women	A three session cognitive-behavioral intervention designed to reduce STIs
<a href="#">Project SMART: AIDS Education for Drug Users in Short-Term Treatment</a>	Adults in in-patient and residential drug/ alcohol treatment facilities	A two-session informational intervention and a six-session enhanced intervention including both information and behavioral skills training
<a href="#">Protect and Respect</a>	Women living with HIV	A clinic-based behavioral intervention to reduce the sexual transmission of HIV
<a href="#">Real Men Are Safe (REMAS)</a>	Adult male substance abuse treatment center attendees	A group-level, clinic-based behavioral intervention designed to reduce HIV/STI risk
<a href="#">Real Talk</a>	AA, GB men	An online, multimedia, culturally appropriate sexual health promotion program
<a href="#">Safety Point</a>	Injection drug users	A community-based intervention that seeks to reduce sex- and drug-related HIV risk factors
<a href="#">SAHARA: Sistas Accessing HIV/AIDS Resources At a click</a>	AA women ages 18 - 29	An interactive, computer-based, culturally appropriate intervention for HIV risk reduction
<a href="#">The SISTA Project</a>	AA women ages 18 - 29	A peer-led program to prevent HIV infection
<a href="#">SMART Couples</a>	HIV serodiscordant couples	A four-session intervention to increase antiretroviral therapy (ART) adherence
<a href="#">Sniffer</a>	Intranasal drug users	A four-sessions program about AIDS, drug use, sexual risk behavior, and drug abuse treatment
<a href="#">Study to Reduce Intravenous Exposures (STRIVE)</a>	Hepatitis C (HCV)-positive injection drug users ages 18 - 35	A group-level, clinic-based, behavioral intervention that aims to reduce risky distributive injection practices
<a href="#">Turning Point</a>	Injection drug users and their sex partners	Two separate interventions designed to reduce the frequency and probability of injection-risk behavior
<a href="#">WILLOW: HIV Transmission Reduction Among Women Living with HIV</a>	AA women living with HIV	An HIV transmission reduction group intervention

<sup>1</sup>Abbreviations used for Target Populations: African American (AA), Asian and Pacific Islander (API), Hispanic (HIS), Lesbian/Gay/Bisexual/Transgender (LGBT), Gay/Bisexual (GB). <sup>2</sup>Additional information on all these programs can be found at <https://www.socio.com/> or by clicking on the hyperlinked Program Name in the table.



**Table 2.** Datasets in the Sociometrics Library with a topical focus on HIV/AIDS/STIs.

<b>DATASET NAME</b>	<b>TARGET POPULATION<sup>1</sup></b>	<b>BRIEF DESCRIPTION<sup>2</sup></b>
<a href="#">Adolescent Decision-Making and Contraceptive Behavior: San Francisco, 1984-1986</a>	506 adolescents	A study examining adolescents' decision-making regarding contraceptive use and its relation to their contraceptive and reproductive intentions and actual behavior
<a href="#">Adolescent Women's Contraceptive Decision Making Project, Baltimore City, 1988</a>	430 adolescent women	A six-month, longitudinal study to determine whether contraceptive use is associated with young women's social networks and attitudes towards pregnancy and contraception
<a href="#">Alternative High School Youth Risk Behavior Study, 1998</a>	8918 students in grades 9 - 12	A study on health-risk behaviors that result in the most significant mortality, morbidity, disability, and social problems
Behavioral Risk Factor Surveillance System (BRFSS) <a href="#">1999</a> , <a href="#">2000</a> , <a href="#">2001</a> , <a href="#">2007</a> , <a href="#">2008</a> , <a href="#">2009</a> , <a href="#">2010</a> , <a href="#">2011</a> , <a href="#">2012</a> , <a href="#">2013</a> , <a href="#">2014</a> , <a href="#">2015</a> , <a href="#">2016</a>	9532 - 506,467 adult US residents	Health-related telephone surveys collecting state data about US residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services
California Survey of AIDS Knowledge, Attitudes & Behavior <a href="#">1987</a> , <a href="#">1988</a>	2012 - 4661 adults in California; augmented data collection for gay-identifying men, multiple/high-risk partner heterosexuals, and recreational drug users	A telephone survey for the purpose of forecasting the course of the AIDS epidemic and planning risk reduction programs
<a href="#">Demographic, Behavioral &amp; Health Characteristics of Injection Drug Users in San Francisco 1985-86</a>	438 intravenous drug users in San Francisco, California	Data on demographic characteristics, sexual and other risk behaviors, and general health characteristics of intravenous drug users
<a href="#">Efficacy of a Standardized Acupuncture Regimen and Amitriptyline Compared with Placebo as a Treatment for Pain Caused by Peripheral Neuropathy in HIV-Infected Patients, 1993-1997</a>	250 HIV-infected patients with lower extremity peripheral neuropathy	A study to evaluate the efficacy of a standardized acupuncture regime and amitriptyline hydrochloride for relief of pain due to HIV-related peripheral neuropathy
<a href="#">Health Behavior Study of Detroit Minority Youth, 1991</a>	1435 urban low income AA and HIS adolescents and young adults	Study to evaluate AIDS knowledge, perception of risk, and risk behaviors related to sex
<a href="#">Los Angeles Women's Health Risk Study, 1990</a>	1024 female street prostitutes	Study of behavior linked to transmission of HIV and other STIs
<a href="#">National AIDS Behavioral Surveys (NABS), NABS I, Complete Sample, 1990-92</a>	13,785 adults ages 18 - 75	Study on sexual practices, drug use, HIV antibody test seeking, and levels of AIDS-related knowledge, beliefs and social skills over the adult life-span
<a href="#">National AIDS Behavioral Surveys (NABS); NABS I, Poststratified separately to selected U.S. metropolitan cities: Chicago, Detroit, Houston, Los Angeles, Miami, New York, Philadelphia, 1990-92</a>	4480 adults ages 18 - 75	Study on sexual practices, drug use, HIV antibody test seeking, and levels of AIDS-related knowledge, beliefs, and social skills over the adult life-span
<a href="#">National AIDS Behavioral Survey (NABS II), 1992</a>	5391 adults ages 18 - 75	Study on sexual practices, drug use, HIV antibody test seeking, and levels of AIDS-related knowledge, beliefs and social skills over the adult life-span
<a href="#">National Health and Social Life Survey, 1992</a>	3432 adults ages 18 - 59	Study on the extent to which sexual conduct and general attitudes toward sexuality are influenced by gender, age, marital status, and other demographic characteristics

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National Health Interview Survey on Disability, <a href="#">Complete Phase I, 1994-1995</a> , <a href="#">Complete Phase II, 1994-1995</a>	235,348 - 284,422 adults ages 19+	A continuous assessment and analysis of health trends in the United States
<a href="#">National Sexual Health Survey (NSHS), 1996</a>	8466 adults ages 18+	Study to assess a wide range of HIV-related and human sexuality topics
<a href="#">National Survey of Adolescent Males-1988 and 1990-91</a>	1880 never-married, non-institutionalized males ages 15 to 19	A two-wave, longitudinal study following young men from adolescence into young adulthood
National Survey of Family Growth, <a href="#">Cycle III (Women Aged 15-19), 1982</a> , <a href="#">Cycle III (Women Aged 15-44), 1982</a> , <a href="#">Cycle III Exposure Interval File, 1982</a> , <a href="#">Cycle IV, 1988</a> , <a href="#">Cycle IV, 1988 and 1990</a> , <a href="#">Telephone Reinterview, Cycle 5, 1995</a> , <a href="#">Cycle 6, 2002</a> , <a href="#">2006-2010</a> , <a href="#">2011-2013</a> , <a href="#">2013-2015</a>	7643 - 32,179 adolescents and adults ages 15 - 44	A study on family life, marriage and divorce, pregnancy, infertility, use of contraception, and general and reproductive health
<a href="#">National Survey of Men, 1991</a>	3321 men ages 20 - 39	Study on issues related to sexual behavior and condom use
<a href="#">National Survey of Women, 1991</a>	1669 women ages 20 - 29	Study examining sexual, contraceptive, and fertility behaviors, along with factors affecting those behaviors
<a href="#">NOD/Harris Survey of Americans with Disabilities, 1998</a>	1000 disabled Americans	A national study of attitudes and experiences of disabled persons
<a href="#">Oakland County, Michigan Contraceptive Self-Care Study, 1987-1989</a>	360 first-time patients at family planning clinics	A study analyzing the prevalence and determinants of the quality of contraceptive use after a first visit to a family planning clinic
<a href="#">Prospero Project Condom Study, San Francisco, 1989-1991</a>	552 male sex workers in San Francisco, CA	Data from face-to-face interviews to gather detailed information about the conditions (e.g., type of partner, type of sexual activity) under which condoms were and were not used
<a href="#">Reaching for Excellence in Adolescent Care and Health, 1996-2000</a>	30,598 HIV-infected and high-risk HIV uninfected adolescents ages 12 - 18	An observational study designed to better understand HIV disease progression and co-morbidity in adolescents
<a href="#">Social Influences on the Sexual Behavior of Youth at Risk for HIV Exposure, 1992</a>	300 AA children ages 9 - 15 living in public housing developments	Data on social support, parental supervision, perceived risk exposure, and self-reported behavior and feeling
<a href="#">State and City Data on Adolescent Fertility, 1970-2001</a>	216 adolescent and young adult women	A compilation of secondary data on adolescent and young women's fertility
<a href="#">Urban Mens Health Survey (UMHS), 1997-98</a>	2881 men who have sex with men (MSM)	A telephone interview on sexual and HIV-related issues
Youth Risk Behavior Survey (YRBS) <a href="#">1992</a> , <a href="#">1993</a> , <a href="#">1995</a> , <a href="#">1997</a> , <a href="#">1999</a> , <a href="#">2001</a> , <a href="#">2003</a> , <a href="#">2005</a> , <a href="#">2007</a> , <a href="#">2009</a> , <a href="#">2011</a> , <a href="#">2013</a> , <a href="#">2015</a> , <a href="#">2017</a>	10,645 - 16,410 students grades 9 - 12	An epidemiologic surveillance system to monitor the prevalence of youth behaviors that most influence health

<sup>1</sup>Abbreviations used for Target Populations: African American (AA), Asian and Pacific Islander (API), Hispanic (HIS), Lesbian/Gay/Bisexual/Transgender (LGBT), Gay/Bisexual (GB). <sup>2</sup>Additional information on all these programs can be found at <https://www.socio.com/> or by clicking on the hyperlinked Program Name in the table.

**Table 3.** Capacity-building tools for HIV professionals in the Sociometrics Library.

RESOURCE NAME	BRIEF DESCRIPTION
<b>GENERAL TOOLS AND RESOURCES</b>	
<a href="#">Adolescent Sexual Health Resources</a>	A series of five science-based resources on adolescent sexual health, including a factual handbook, HIV/AIDS teaching kit, and activity sourcebook
<a href="#">The Abstinence and Contraception Education Storehouse (ACES)</a>	An online library of multimedia activities and exercises that can be used to enhance behavioral skills training in teen sexual risk reduction interventions
<a href="#">HIV RAP (Research and Practice) Interactive</a>	A collection of interactive, multimedia, science-based HIV information, prevention resources, and personal stories
<a href="#">HIV/AIDS Prevention Practitioner Institute (HPPI)</a>	Five interactive, multimedia, computer-delivered courses (and accompanying texts) designed to increase capacity to plan, evaluate, and sustain effective HIV prevention interventions
<a href="#">Know the Risks (KTR): An Interactive HIV/AIDS Information and Personal Risk Assessment Center</a>	A computer-based sexual health and HIV/AIDS prevention education application
<a href="#">Know the Risks/Sexual Health Over 50 (KTR50)</a>	A computer-based sexual health and HIV/AIDS prevention education application targeting adults aged 50 and older
<a href="#">PETRA: Promoting Education, Training &amp; Research on AIDS</a>	Easy-to-navigate, easy-to-understand online resource modules designed to increase understanding of the social and behavioral aspects of the HIV/AIDS epidemic
<a href="#">Tools for Building Culturally Competent HIV Prevention Programs (CC)</a>	An interactive website to help HIV prevention professionals who are planning, implementing, or evaluating programs to increase the cultural competence and effectiveness of HIV prevention efforts
<b>TRAINING MODULES FOR SPECIFIC EBPs</b>	
<a href="#">FOCUS Training Modules</a>	A series of eight interactive modules providing training on how to implement the intervention FOCUS: Preventing Sexually Transmitted Infections and Unwanted Pregnancies among Young Women
<a href="#">HORIZONS Training Modules</a>	A series of six interactive modules providing training on how to implement HORIZONS: an STI/HIV Sexual Risk Reduction Intervention for African American Girls
<a href="#">mDOT Training Modules</a>	A series of eight interactive modules providing training on how to implement the mDOT Program: For Individuals Receiving Highly Active Antiretroviral Therapy (HAART)
<a href="#">Multimedia WILLOW Training Modules</a>	A series of eight interactive modules providing training on how to implement the intervention Multimedia WILLOW: HIV Transmission Reduction Among African American Women Living with HIV
<a href="#">Rikers Health Advocacy Program (RHAP) Training Modules</a>	A series of six interactive modules providing training on how to implement the Rikers Health Advocacy Program (RHAP)
<a href="#">SAHARA Training Modules</a>	A series of six interactive modules providing training on how to implement the intervention SAHARA: Sistas Accessing HIV/AIDS Resources At a click
<a href="#">Sexual Health and Adolescent Risk Prevention (SHARP) Training Modules</a>	A series of nine interactive modules providing training on how to implement the intervention Sexual Health and Adolescent Risk Prevention (SHARP)
<a href="#">Teen Health Project (THP) Training Modules</a>	A series of eight interactive modules providing training on how to implement the Teen Health Project (THP): Community-Level HIV Prevention Intervention for Adolescents in Low Income Housing Development

behavior; attitudes and beliefs regarding sexual behavior; HIV/AIDS-related knowledge, attitudes, behaviors, and serostatus; current and past episodes of STIs; and other high-risk behaviors, including alcohol/drug use and prostitution. Included for each dataset are the raw data in ASCII and CSV format, question-

naires, codebooks, frequencies, and SPSS and SAS analytic statements for statistical analysis of datasets. Many different papers have been written analyzing the datasets in **Table 2**, with various findings. These papers are not included in the Sociometrics Library, but can be readily found on databases such as PubMed and Google Scholar.

### 3.1.3. Capacity-Building Tools for HIV Professionals

The Sociometrics Library offers 16 capacity-building tools aimed at HIV professionals. These resources aim to increase the capacity of HIV educators and prevention providers to adapt, implement, and evaluate HIV prevention programs successfully. Some focus on specific HIV-related EBPs, while others focus on HIV risk reduction more generally. Some are offered in PDF format and others in interactive, multimedia format. **Table 3** details the capacity-building resources for HIV professionals available in the Sociometrics Library.

## 3.2. Access

The evidence-based HIV/AIDS EBPs, datasets, and capacity-building tools in **Tables 1-3** above can be accessed through individual, group, and institutional subscriptions (contact [jjcard@socio.com](mailto:jjcard@socio.com) for access information). Individual subscriptions allow a single health professional or practitioner to access, view, and administer one or more Library resources 24/7 from their computer, tablet, or smartphone. Group subscriptions allow a team of health professionals, researchers, and educators access, view and administration privileges. A group administrator can purchase access for team members and manage access centrally. Finally, an institutional all-access pass can be purchased by community-based organizations, hospitals and health clinics, universities, public health departments, and other interested institutions. This institutional all-access pass grants access to the entire resource library of 400+ EBPs, datasets, and capacity-building tools in <https://www.socio.com/>.

## 4. Discussion

The Sociometrics Library is a significant step forward in meeting the research-to-practice needs of frontline HIV prevention practitioners. In order to have a positive impact in the real-world, this library was built on the latest scientific knowledge, duly translated into formats accessible to global workers trying to stem the epidemic. The Sociometrics Library has many innovations, all aimed at facilitating real-world impact:

- 1) **Identification and archiving of HIV prevention programs that science has found to be efficacious in reducing behaviors putting one at risk of HIV transmission.** The collection of these validated prevention programs in one place saves health professionals valuable time and costs otherwise spent remaining up-to-date on the prevention literature and seeking out ways to access complete versions of the effective curriculum and implementation materials. The Sociometrics Library of replication-ready resources simplifies

a process that currently presents a significant barrier to the use of evidence-based programs by HIV prevention practitioners.

- 2) **Identification and archiving of datasets that science has found to be of high technical merit.** The collection of the exemplary HIV/AIDS datasets in one place saves health researchers valuable time and costs otherwise spent remaining up-to-date on the prevention literature and seeking out the best ways to access the data on which publications were based. The Sociometrics Library of analysis-ready raw data and documentation simplifies a process that currently presents a significant barrier to secondary analysis of exemplary data by HIV prevention researchers.
- 3) **Digitization and organization of effective program implementation materials to facilitate global access via the Internet.** This innovation allows formerly printed, hard-copy educational products to be accessed at low cost anytime, any place. Health educators can now access prevention programs live during program implementation from their computer, tablet, or mobile phone. The curricula and materials are organized in lesson-by-lesson sequence, enabling easy use of the materials in schools, community-based organizations, clinics and hospitals.
- 4) **Provision of capacity-building tools.** The Sociometrics Library also includes science-based capacity-building and professional education tools that directly address some of the most significant challenges that prevention practitioners face when applying science-based research. These tools assist with adaptation of evidence-based programs to local settings, while maintaining the core program elements underlying the program's effectiveness. Other tools describe how to appropriately evaluate prevention efforts and analyze research datasets.
- 5) **Provision of online browsing, search, and filtering capabilities to improve users' ability to find and select relevant products.** The Sociometrics Library not only gathers effective programs, datasets, and capacity-building tools in one place, but also enables easy search and navigation within the library itself. Keyword search and filter capabilities by topic, target population, and product type allow users to quickly and easily find the most relevant product(s) for their needs.
- 6) **Provision of original evaluation instruments.** In order to encourage re-evaluation of the efficacious programs in a new setting, the Sociometrics Library also includes the original evaluation instrument used to demonstrate the efficacy of each program. The instrument can be re-used as is, or modified for use in a new evaluation in a new setting. The Sociometrics Library also offers additional, generic resources for program evaluation. The family of evaluation instruments and resources supporting each effective program facilitates re-evaluation in a new setting, to test the robustness of the initial finding of efficaciousness in the original site and to improve future implementations in the local site.
- 7) **Scalable design.** The Sociometrics Library was built with both scalable de-

sign and a technological infrastructure for ease of future expansion, as other effective programs, datasets, and capacity-building tools are identified. The innovative technological platform allows for the upload and distribution of a wide variety of product and file types, including increasingly common multimedia products.

## 5. Conclusion

The Sociometrics Social, Behavioral, and Health Sciences Library at <https://www.socio.com/> is a rich and innovative source of exemplary HIV/AIDS evidence-based programs (EBPs), datasets, and capacity-building tools for the continued professional education of HIV professionals. With several new innovations in prevention programming—such as low cost 24/7 access to all facilitator, student, and evaluation materials comprising a diverse set of effective HIV/AIDS prevention programs; and “responsive design” for use on computers, tablets, and smartphones—the Sociometrics Library facilitates research as well as EBP uptake, implementation, and evaluation across a range of settings, including schools, clinics, community-based organizations, universities, global settings, low-resource settings, and settings with specific minority populations that have shouldered the brunt of the HIV epidemic.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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