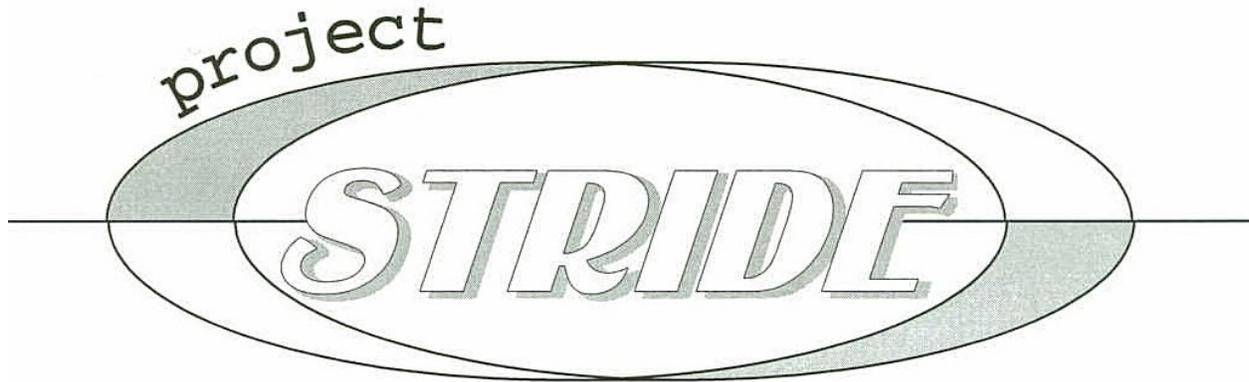


*Project Stride*  
*Methodology and Technical Notes*



**Ilan H. Meyer**  
**David M. Frost**  
**Rafael Narvaez**  
**Jessica H. Dietrich**

## Table of Contents

<b>Project Stride methodology and technical notes</b> .....	3
<b>Design</b> .....	3
<b>Sampling</b> .....	4
Sampling Venues .....	4
<b>Respondents</b> .....	6
<b>Measures</b> .....	7
Screens .....	7
Outcomes .....	9
Predictors .....	12
Self and Identity .....	16
Coping and Social Support .....	22
Potential Confounders and Effect Modifiers .....	24
Qualitative Interview .....	26
<b>References</b> .....	29
<b>Appendix A - Project STRIDE Screening Form</b> .....	34
<b>Appendix B.1 – Example Recruitment Flier (Men Only)</b> .....	36
<b>Appendix B.2 – Example Recruitment Flier (Women Only)</b> .....	37
<b>Appendix B.3 – Example Recruitment Flier (Straight Only)</b> .....	38
<b>Figure 1 – Geographic Location of All Participants by Sexual Orientation</b> .....	39
<b>Figure 2 - Geographic Location of LGB Male and Female Participants</b> .....	40
<b>Figure 3 - Geographic Location of LGB White, Black, and Latino Participants</b> .....	41
<b>Figure 4 – Breakdown of Recruitment procedures</b> .....	42
<b>Table 1 - Project Stride venue classification system</b> .....	43
<b>Table 2: Project Stride individuals screened by venue type and composition</b> .....	44
<b>Table 3: Outcome Rates for Project Stride Recruitment</b> .....	45
<b>Table 4 - Project Stride respondents by recruitment source</b> .....	46
<b>Table 5: Demographics for the Total Stride Sample</b> .....	47
<b>Table 6 - Project Stride individuals screened by venue type and composition</b> .....	48
<b>Table 7 – Psychometric Properties for Project Stride Measures</b> .....	49

## Project Stride methodology and technical notes

Ilan H. Meyer, David M. Frost, Rafael Narvaez, & Jessica H. Dietrich

### Design

Project STRIDE was a large scale NIMH-funded research conducted in the New York City area among diverse populations defined by sexual orientation, race/ethnicity, and gender. The primary aims of the project were to: (a) to describe identity structures and social stressors related to prejudice among minority group members, (b) to explore coping and social support resources that minority group members use to confront social stressors, and (c) to assess the associations among stress, identity, and mental health problems.

The study used a longitudinal design with measures at baseline and after a one-year follow-up. Baseline interviewing began in February 2004 and was completed in January 2005. At each time point, respondents were engaged in a comprehensive in-person interview using computer-assisted and paper-and-pencil instruments. The baseline interviews lasted a mean of 3.82 hours (SD = 55 minutes), respondents were compensated \$80; follow-up interviews lasted a mean of 1.91 hours (SD = 30 minutes) and respondents were compensated \$60. To encourage timely completion of Time 2 interviews, an additional \$10 gift card was given to respondents who completed their follow-up interview by their due date. Respondents were interviewed in a research office in Washington Heights or Chelsea; on rare occasions, as needed, interviews were conducted at another location that allowed for privacy and convenience, such as the respondent's home. To maximize retention of respondents, four were conducted over the phone when respondents could not be reached in person otherwise.

## Sampling

The study's approach to recruit study respondents followed a paradigm of ethnographic immersion into communities. This overall strategy called for a venue-based, sampling of both lesbian, gay, and bisexual (LGB) and straight respondents. Recruitment was done by research workers who approached potential study participants in these venues and personally asked them to participate. No passive recruitment, such as using large-scale advertising campaigns, was used. This was done to allow researchers greater control over the sources of recruitment utilized and to allow estimation of response rates. When they approached potential study participants, the research workers engaged potential respondents in a brief conversation to explain the purpose of the study and asked them to fill-out a brief screening form that would determine eligibility for participation in the study. The screening form included questions about the respondent's age, race/ethnicity, sexual orientation, gender, sex at birth, zip code of residence, years of residence in New York City, and contact information (See Appendix A). Brochures and information/invitation cards were then given to potential respondents who preferred to call the study staff to be screened over the phone at a later time (See Appendix B.1 – B.3). Twenty five outreach workers visited a total of 274 venues comprised of 207 different individual places. These venues were dispersed across 32 different zip codes.

### *Sampling Venues*

Sampling venues were selected to ensure a wide diversity of cultural, political, ethnic, and sexual representation within demographics of interest. To control for venue biases, a cap of 25% was established for the number of respondents taken from each of five following *venue types*: (a) bars (i.e., establishment where alcohol was served); (b) non-bar establishments (i.e., indoor commercial establishments where no alcohol was served, such as coffee shops, gyms,

book stores, art galleries, and sex shops); (c) outdoors (i.e., parks and streets); (d) groups (i.e., community organizations and groups organized around a variety of activities or interests such as sports, politics, culture, racial, ethnic, or national interests); and (e) events (e.g., Gay Pride). To avoid excessive biasing of the sample, some venues were purposefully excluded from our sample, e.g. groups or events that had a therapeutic function, such as 12-step programs or HIV/AIDS support groups. The diversity of the sample was enriched through the use of a sixth venue, *snowball sampling*, in which respondents were given letters of invitation to pass along to potential respondents, such as friends and colleagues. This allowed for the recruitment of respondents who were less likely to be found in public venues. As an incentive, respondents were given a \$10 gift card for each effective referral. Each venue was further classified with regard to its *composition* (a) a *general* venue, where members or attendants were the general New York City population (e.g., mostly heterosexual individuals); (b) a *mixed* venue, which had approximately equal numbers of straight and LGB individuals; and (c) a *mostly LGB* venue, which included LGB-specific establishments or events. See Table 1 for specific examples of how the venues were classified. We made three exceptions to this sampling strategy in obtaining the straight sample. The purpose of these exceptions was to attempt to recruit a general heterosexual sample while removing significant sources of bias. First, bars were *not* used as recruitment venue for straight respondents. We included bars as a recruitment source for LGB respondents given the cultural and historical function that bars have had for the gay communities but believe that bars would introduce different types of bias in sampling heterosexuals. Second, similarly, straight groups or events were also not targeted given that participation in groups and events could have a different social support function for gay and straight individuals. Finally,

straight snowball referrals by LGB respondents were not contacted for interviews. This was done to avoid a straight sample that has a special connection or affiliation with LGB individuals.

The distribution of screened individuals by venue type and composition is provided in Table 2. Recruitment efforts were successful at reaching individuals who resided in diverse New York City neighborhoods: interviewed individuals resided in 128 different New York City zip codes and no more than 3.8% resided in any one zip code area (see Figure 1, 2, and 3 for geographic distribution of participants by sexual orientation, gender, and race).

### Respondents

Respondents were selected from among eligible screened individuals using a representative case quota sampling method (Shontz, 1965) to fill 16 cells of a table corresponding to variation in gender (male and female), sexual orientation (LGB and straight), race/ethnicity (white, Black, and Latino), and age group (18-30 and 31-59). Individuals were eligible to participate in the study if they (a) self-identified as male or female and were assigned that sex at birth; (b) self-identified as lesbian, gay, bisexual (LGB), straight, or used other terms conveying such identification (e.g., queer, heterosexual); (c) self-identified as White, Black, or Latino or used other terms conveying such identifications (e.g., Hispanic, African American); (d) were between the ages of 18 and 59; (e) resided in New York City for two years or more; and (f) were able to speak English well enough to engage in casual conversation. Individuals were not eligible to participate in the study if a close family member or live-in partner already participated in the study.

Figure 4 depicts the recruitment of the study sample. It shows that 2,289 (53%) of the 4,302 people approached by study recruiters agreed to respond to the screening instrument. Of these, 878 (38%) were not eligible, 624 (27%) were eligible but exceeded targeted cell sized (i.e.,

oversampled), and 787 (34%) were eligible. Study interviewers attempted to reach those 787 eligible individuals. Of them, 116 (15%) refused; 185 (24%) could not be contacted due to wrong or missing contact information; and 486 (62%) were interviewed; 38 additional respondents were recruited from screening forms collected in a previous study that used similar recruitment methods for a total baseline sample of 524. The cooperation rate for the study was 79% and the response rate was 60% (AAPOR, 2005). See Table 3 for the response and cooperation rates for the study by gender, race, and sexual orientation as well as notes on their calculation. There were no major differences between the response rates for all recruitment (Stride and Scope) and recruitment for Project Stride specifically. The only difference in response rate greater than or equal to .05 was among gay Black women (Response rate for all recruitment = .57 and for Stride only = .63). Table 4 shows the respondent subgroups by recruitment source. Demographic information for the sample can be found in Table 5. Demographic information for the sample by recruitment venue can be found in Table 6. At time 2 we interviewed 371 of the 524 respondents interviewed at time 1, yielding a retention rate of 94%.

### Measures

The interview contained a number of both quantitative and qualitative measures. These measures are listed below by (a) their place in the causal model, and (b) alphabetical order. Table 7 provides a list of all scales used in the study with their reliability statistics. Table 8 outlines which measures had missing data that were replaced using either mean or mode substitution.

### *Screens*

Demographic characteristics. Socio-demographic information collected about respondents included age, education (i.e., highest grade completed ranging from some high school to doctoral degree), race, and Hispanic ethnicity adopting the measures developed and used by the U.S. Census Bureau in the U.S. population survey of 2000. In addition to these items, racial/ethnic identity was also be assessed with the question “What is the country of origin related to your or your family’s ethnic or national background, if any?” Respondents were allowed to select up to two nations from a comprehensive listing. For the purposes of the study, our instrument also assessed whether or not participants were natives of NYC or migrated here as adults.

Respondents were asked what their current employment status was. They were allowed to choose all that applied from the following categories: Employed full-time; employed part-time; student; self-employed; unemployed looking for work; retired; on disability or sick leave; temporarily laid off; homemaker; or other. Unemployment was recoded so that students were no longer classified as being unemployed. Anyone endorsing both “unemployed/looking for work” and “student” was excluded from the unemployed category. Further, anyone endorsing “employed”, “self-employed”, “retired”, and/or “homemaker” was excluded from the unemployed category.

Respondents were also asked if they were currently in a relationship or felt as special commitment to someone. If they answered yes, they were asked how long their relationship has lasted, if they live with their partner, and whether they are their partner are married, domestic partners, or bound by some other legal document. Respondents were also asked if they have children and if their children lived with them at the time of the interview.

Sexual orientation. A brief, 5-item questionnaire for screening sexual orientation adapted from Laumann et al. (1994), and successfully used in previous studies by the principal investigator (Meyer & Colten, 1999; Meyer et al., 2002) was included. Questions assessed the gender of the respondents' sex partners since age 18, during the previous 5 years, and within the last year prior to the interview. Responses were categorically recorded, and included the option of selecting either: 1 = "with men only," 2 = "with women only," 3 = "both men and women," or 4 = "no sexual contact." After these questions were answered, respondents were asked how sexually attracted they are to persons of the same gender (i.e., 1 = "men only" to 5 = "women only") and how appealing it was for them to have sex with someone of the same gender (i.e., 1 = "very appealing" to 4 = "not at all appealing").

### *Outcomes*

Depressive Symptoms. The Center for Epidemiological Studies depression scale (CES-D) is a 20-item measure of depressive symptoms experienced over a one week period prior to the conduction of the interview. The scale is a widely used measure of generalized distress with good reliability and validity (Radloff, 1977; Roberts & Vernon, 1983). Some of the items were: "During the past week... you felt depressed / you felt hopeful about the future / you felt people dislike you." Respondents responded to such items on a 4-point scale (i.e., 0 = "rarely or none of the time (<1 day);" 3 = "most or all of the time (5-7 days)"). The measure demonstrated internal consistency within the baseline sample ( $\alpha = 0.92$ ). Some items were reverse coded so that higher scores reflected more depressive symptoms. Scores were then summed creating a total for each participant ranging from 0-60.

Mental and Substance Use Disorders (CIDI). The study also included the CAPI version of the World Mental Health Composite International Diagnostic Interview (WMH-CIDI), a state-of-the-art structured diagnostic interview used in the National Comorbidity Survey (Kessler et

al., 2005). The WMH-CIDI was designed for administration by trained interviewers who are not clinicians. It was used in the current study to assess lifetime and current (one-year) prevalence of DSM-IV defined affective and substance-use disorders. The WMH-CIDI has good documented inter-rater reliability, test-retest reliability, and validity (Kessler et al., 1994). Current literature also attests to the use of the CIDI scale on an international level (Kessler et al., in press (a); Kessler et al., in press (b)).

**Psychological Distress.** This measure assessed psychological distress in two domains: guilt and sexual problems. Guilt is a measure of rational or irrational feelings of guilt. This 4-item scale measured feelings of doing wrongness and/or personal blame within the past year. Respondents were given 5 possible response choices ranging from 1 = “never” through 5 = “very often” to questions such as “How often have you felt guilty about the things you do or don’t do?” This subscale was internally consistent ( $\alpha = .69$ ). Sex Problems over the last 12 months were assessed utilizing a measure of problems related to inhibited sexual desire, excitement, or orgasm (4 items for women and 5 items for men, Meyer, 1995). The same 5-point scale and coding was used in response to questions like: “How often have you had no interest in sex”? This subscale was internally consistent ( $\alpha = .71$  and  $.74$  for men and women, respectively). For both subscales, items were coded so that higher scores reflected more psychological distress. Scores were totaled and then divided by the number of items in each subscale to obtain a final mean score for each participant.

**Psychological well-being.** Adapted from Ryff (1989) and Ryff & Keyes (1995), respondents were asked whether they agreed or disagreed with each of 18 items. This measure was developed to integrate theories of life course development and mental health conceptions of psychological well-being. Psychological well-being dimensions included self-acceptance (e.g.,

“When I look at the story of my life I am please with how things have turned out”), positive relations with others (e.g., “I have not experiences many warm and trusting relationships with others”), autonomy (e.g., “I judge myself by what I think is important, not by the values of what others think is important”), environmental mastery (e.g., In general, I feel I am in charge of the situation in which I live”), purpose in life (e.g., Some people wander aimlessly in life, but I am not one of them”, and personal growth (e.g., “For me, life has been a continuous process of learning, changing, and growth). Each subscale contained 3 items. Although previous studies employing the measure have demonstrated internal consistency coefficients for the seven scales ranging from .87 to .93 (Ryff, 1989), the scales in the current study ranged from .25 to .55. Given the difference between the current and previous alphas, a confirmatory factor analysis was conducted using Lisrel to test whether a 6 factor model fit the data better than a single factor model. Results of this analysis demonstrated that a 6 factor model (chi-square = 552.07,  $p < .001$ ; RMSEA = .091; GFI = .89) fit the data better than a 1 factor model (chi-square = 873.51,  $p < .001$ ; RMSEA=.110; GFI = .84). All items were coded so that higher scores reflected higher well-being. Summed scores were divided by the number of items in each subscale to obtain mean total scores for each participant. Both a total psychological well-being score and subscale scores were used depending on the theoretical questions of interest. This portion of the interview was also self-administered.

Social well-being. Adapted from Keyes (1998), the 15-item scale examines the respondents’ perception of their social environment. Social well-being dimensions included social-acceptance, social actualization, social contribution, social coherence, and social integration (3 items per subscale). Some statements assessed included: “Society has stopped making progress,” and “I have nothing important to contribute to society.” Participants

responded on a scale ranging from 1 (“strongly agree” to 7 (“strongly disagree”). A confirmatory factor analysis was conducted using Lisrel to test whether a 5 factor model fit the data better than a single factor model. Results of this analysis demonstrated that a 5 factor model (chi-square = 355.86,  $p < .001$ ; RMSEA = .081; GFI = .92) fit the data better than a 1 factor model (chi-square = 768.31,  $p < .001$ ; RMSEA = .120; GFI = .84). All items were coded so that higher scores reflected higher social well-being. Summed scores were divided by the number of items in each subscale to obtain mean total scores for each participant. Both a total social well-being score and subscale scores were used depending on the theoretical questions of interest. This portion of the interview was also self-administered.

### *Predictors*

**Chronic Strain.** Respondents’ experience of chronic strains was measured using a scale adapted from an inventory developed by Wheaton (1999). 28 items inquired about sources of chronic strain in 9 areas of life: general or ambient problems, financial issues, work, relationships, parenting, family, social life, residence, and health. On a scale of 1-3, respondents were asked to indicate whether statements such as “You’re trying to take on too many things at once” were not true, somewhat true, or very true for them at this time. All responses were coded so that higher scores reflected more chronic strain. Summed scores were divided by the number of items to obtain mean total scores for each participant.

**Closet.** This measure assessed the degree of disclosure of sexual orientation to (a) family, (b) straight friends, (c) LGB friends, (d) co-workers, and (e) health care providers. Respondents describe the extent to which they were “out of the closet” to each of these groups on a scale of 1 to 4 (“out to all, out to most, out to some, out to none”) (Meyer et al., 2001).

**Everyday Discrimination.** The Everyday discrimination measure was modified from the 8-item instrument originally developed by Williams et al. (1997), based on qualitative research

with African Americans. This instrument measured chronic, routine, and less overt experiences of unfair treatment. The scale assessed the experience of being treated with less courtesy, less respect, and receiving poorer service than others, as well as being threatened or harassed, called names or insulted. The scale was adapted so that it applied to all the minority groups in the study (i.e., gender, ethnoracial and sexual minority identities). The questions inquired as to how often these experiences occurred over respondents' lifetimes on a 4-point scale (1= "often" through 4= "never"). For each item, respondents were asked whether the experience was related to their sexual orientation, gender, ethnicity, race, age, religion, physical appearance, income level/social class, or some other form of discrimination. Responses were coded so that higher scores reflected more everyday discrimination. Summed scores were divided by the number of items for the scale to obtain a mean total score for each participant.

**Internalized Homophobia.** Internalized homophobia assessed the extent to which LGB women and men do not accept their sexual orientation, are uneasy about their same-sex desires, and seek to avoid homosexual feelings (Martin & Dean, 1987; Herek & Glunt, 1995). The scale consisted of 9 items. For example, one item read: "How often have you wished you weren't gay?" Respondents rated the frequency with which they experienced such thoughts and feelings in the year prior to the interview on a 4-point scale ranging from 1 = "often" to 4 = "never." The scale had good reliability at baseline ( $\alpha=.8438$ ). Responses were coded so that higher scores reflected more internalized homophobia. Summed scores were divided by the number of items in the scale to obtain a mean total score for each participant.

**Stigma.** A scale that assessed expectations of rejection and discrimination based on one's homosexuality which was modified by Martin & Dean (1987), as an adaptation from Link (1987), was further tailored for this study. For example, one item in Martin & Dean's study

asked: "Most people would willingly accept a gay man as a close friend." Respondents rated their responses on a 6-point Likert scale ranging from "strongly agree" to "strongly disagree." The scale has good psychometric properties in LGB people ( $\alpha=.88$ ) (Martin & Dean, 1987; Herek & Glunt, 1995). The study adopted this scale following Krieger & Sidney (1996) and others (e.g., Kessler et al., 1999; Schulz et al., 2000; Williams et al., 1999) so that each question applied more generally and that the subject of stigmatized condition was not predetermined. Before proceeding with the questions, interviewers read the following prompt: "These next statements refer to a person like you; by this I mean persons who have the same gender, race, sexual orientation, nationality, ethnicity, and/or socioeconomic class as you.... I would like you to respond on the basis of how you feel people regard you in terms of such groups." In the current study, the example provided above read, "Most people would willingly accept someone like me as a close friend." As can be seen in the difference between this and the above example, the target stigma of gay has been removed and the more general prompt of "someone like me" was added. All study respondents received this assessment regardless of minority status. This approach allowed comparison among all respondents. Participants responded to a 6-item measure that utilized a 4-point scale ranging from 1 "agree strongly" to 4 "disagree strongly." The measure was internally consistent at baseline ( $\alpha = .8826$ ). Responses were coded so that higher scores reflected more stigma. Summed scores were divided by the number of items in the scale to obtain mean total scores for each participant.

Stressful Life Events. Adapted from the SEPRATE (The Structured Event Probe and Narrative Rating) scale (Dohrenwend et al., 1993; Dohrenwend, 2004), this instrument was used to evaluate general life events by assessing both subjective and objective stress-inducing properties of life events, including source (i.e., two variables assessing the extent to which an

event occurred outside of the respondents' control), threat to life, physical integrity, goals, and magnitude of change in usual activities that is likely to be brought about for an average person. The interview included an events checklist and probes about the number, dates, and types of events the participant experienced. The standard checklist was modified to include neutral language (e.g., "marital infidelity" was changed to "infidelity in a committed relationship or marriage"). A total of 43 possible life events were assessed. All events receiving an affirmative response were probed using standardized forms and guidelines. Each probe examined explicit evidence regarding the cause and context of the event (for example, the circumstances of a job loss), regardless of the participant's attribution of the cause of the event.

After comprehensive data were collected, two independent raters rated the event on the dimensions outlined above (i.e., prelude; occurrence; threats to life, physical integrity, needs, and goals; and magnitude of change in usual activities that is likely to be brought about for an average person) on scales of 0 to 4 (for source and magnitude) and 0 to 5 (for all other dimensions). The raters also classified the event as whether or not prejudice was involved. If prejudice was involved, the extent to which the event was motivated by prejudice was rated on a scale of 0 to 4 and the type of prejudice that was involved (i.e., gender, ethnic/racial, age, SES, religion, gender nonconformity, physical appearance, disability, or sexual orientation) was specified.

For purposes of analysis, the average score of the two raters was computed. Cases in which the two raters were discrepant by more than 1 point for prelude, occurrence, and magnitude or 1.5 for any of the centrality dimensions were resolved by the research team in weekly rating meetings. Each event had the potential to be rated on 15 dimensions. At time 1, 5,139 events were rated (i.e., 77,085 potential ratings). Of these potential ratings, 2.2% (1,705)

were found to be discrepant after ratings were complete and the data was cleared of entry errors. The most frequently discrepant ratings were source and magnitude.

### *Self and Identity*

Assessment of Multiple Identities (AMI). Participants reported up to 12 personal, relational, and collective identities in response to the question, “Who am I?” (Kuhn & McPartland, 1954). Among these 12 identities, participants were asked to specify their gender, racial/ethnic, and sexual identities (as described above, self-identification in these categories was an eligibility criterion). To help participants consider the multiplicity of identity when completing this exercise, they viewed a diagram that listed numerous categories of potential personal, relational, and collective identities (e.g., relationship status, employment, religious affiliation, community memberships, recreational interests, personality and personal qualities, health and medical conditions). Participants rated each identity that they nominated on a set of 70 attributes derived from the five-factor model of personality (Costa & McCrae, 1992). This attribute list included terms such as “talented,” “guilty,” “unhappy,” “attractive,” and “dependable,” and participants indicated whether each attribute “does not apply” to a certain identity (0), “applies to some extent” (1), or “applies to a great extent” (2).

Participants were asked to characterize their identities in terms of a set of personality traits because previous studies showed this approach to be appropriate and sound. HICLAS was originally applied to a method of identity assessment that elicited identity attributes from participants through a free-response format (Rosenberg & Gara, 1985). A variety of identity attributes were elicited from participants, including personality traits, emotional terms, behavioral descriptions, and values and goals. This method took many hours to complete, and a great deal of this time was devoted to the elicitation of free-response descriptions of identities. Since such free-response methods are unwieldy for use in a larger-scale study, various fixed list

of attributes were explored (Woolfolk et al., 1995). Personality trait terms were chosen for these attribute lists because they had populated most of the clusters observed in free-response studies of identity (Rosenberg & Gara, 1985), whereas other terms were used more restrictively in this regard. Research findings suggest that the present 70-item list of identity attributes represents a satisfactory substitute for a free-response list. Gara et al. (2002) found that the present list replicated findings obtained from free-response applications such as the relationship of complexity to depression (Gara et al. 1993), and that identity complexity measures derived from the use of the present list showed good psychometric properties.

Measuring up to 12 participant identities and their associated descriptions through the AMI allowed for the use of HICLAS analysis to characterize each participant in terms of five sets of identity measures: identity *valence*, *prominence*, *integration* (in terms of identity commonality and convergence), *pair identity commonality* (dichotomous and ordinal), and *self complexity* (global, positive, and negative). Specific operationalizations are reported below. HICLAS modeled the implicit interrelationships among the identities nominated by the participant on the basis of commonalities and distinctions in the attributes used by the participant to describe these identities. HICLAS contains similarities to factor analysis (Boolean method) and block modeling, but it uniquely allows for an explicit representation of the potentially hierarchical and overlapping interrelationships among identities. Because HICLAS requires a binary data matrix, participant ratings of their identity attributes were dichotomized for the purpose of analysis (0 “does not apply” vs. 1 “applies to some extent” or 2 “applies to a great extent”).

HICLAS software (DeBoeck & Rosenberg, 1988) was used to analyze the identities and identity attribute ratings provided by the participants. The software follows an iterative process

of differentiation to identify clusters of identities and their corresponding attributes. Each level of differentiation is termed a “Rank.” At the lowest level of differentiation (Rank 1), all identities and attributes are combined into a single, unified cluster. Each successive increase in Rank breaks the identities and attributes into increasingly differentiated and hierarchical sets of clusters<sup>1</sup>. The analysis reported here employs HICLAS results at Rank 4, which has previously demonstrated consistently high levels of goodness-of-fit (>.80) and good psychometric properties for the modeling of identity interrelationships (Allen et al., 1999; Gara et al., 2002; Woolfolk et al., 1995, 1999). It is important to note that the resulting identity models may not include an identity if it was described by few or no attributes, and it therefore demonstrated little or no commonality with the description of other identities.

The five sets of HICLAS variables were defined as follows. 1) *Valence* was defined as the percentage of positive attributes used to describe a target identity. It was calculated as the number of positive attributes associated with the identity divided by the total number of attributes associated with the identity. The valence statistic for each target identity could therefore range from 0 to 100%. 2) *Prominence* referred to the location of a target identity within the hierarchical model of identity interrelationships. An identity could be positioned at different tiers within the model, depending on the degree to which it is elaborated by attributes. Identities characterized by a greater number of attributes are located at higher tiers within the hierarchical model. The prominence of a target identity was coded on a range from 0 (indicating that the target identity was dropped from the model) to 4 (indicating that the identity was at the highest possible level within the model). 3) The study also contained two measures of identity *integration: commonality and convergence*. *Commonality* referred to the degree to which a target identity showed direct connections to other identities within the identity model (that is,

they shared common attributes). Commonality was defined as a proportion, calculated as the number of identities connected to a target identity divided by the total number of identities. The commonality statistic for each target identity could thus range from 0 to 100%. *Convergence* referred to the degree to which a target identity showed overlap with other identities within the identity model (that is, they shared precisely the same attributes). Convergence was defined as a proportion, calculated as the number of identities that showed overlap with a target identity divided by the total number of identities. The convergence statistic for each target identity could thus range from 0 to 100%. 4) *Pair identity commonality* provided an assessment of the relationship between two target identities within the identity model for each participant. Pair identity commonality was defined two ways: dichotomous and ordinal. The dichotomous formulation of pair identity commonality indicated whether or not two target identities demonstrated commonality. If they showed commonality, then one identity was superordinate, subordinate, or overlapping with respect to the other – that is, they shared some set of common attributes. If they did not show commonality, then the two target identities either fell in different and unconnected clusters, or one or both identities dropped from the model altogether. The ordinal formulation of pair identity commonality indicated the degree of commonality between two target identities. The two target identities could show full commonality (that is, they demonstrated overlap in the sense that they were both described by the exact same attributes), some commonality (they were either superordinate or subordinate with respect to each other, indicating that they shared some but not all attributes), or no commonality (the two target identities either fell in different and unconnected clusters, or one or both identities dropped from the model altogether). 5) The study also contained three measures of self *complexity*. *Global self-complexity* referred to the total number of identity and attribute clusters within the

identity model (Robey et al., 1989). Identity models may contain a highly complex structure with many clusters, or a comparatively simpler structure with fewer clusters. Identity complexity could technically range from 1 (a single attribute cluster) to 70 (70 individual and separate attributes), but a Rank 4 HICLAS commonly produces 5 to 15 identity and attribute clusters. *Positive self-complexity* referred to the number of identity and attribute clusters with a positive valence (that is, each cluster contained at least 2/3rds positive attributes). *Negative self-complexity* referred to the number of identity and attribute clusters with a negative valence (that is, each cluster contained at least 2/3rds negative attributes).

**Collective Self-Esteem.** The collective self-esteem scale (Luhtanen & Crocker, 1992) was used to assess individuals' evaluation of their collective identity and group memberships. Four domains of collective self-esteem were assessed using 4 items each. They were membership esteem, public collective self-esteem, private collective self-esteem, and importance to identity. Items included "I often regret that I belong to some of the social groups that I do" and "Others respect the social groups that I belong to". Respondents rated the extent to which they agree with each of the 16 statements on a scale of 1 (strongly agree) to 7 (strongly disagree). Cronbach's alphas for the subscales ranged from .70 to .80. Responses were coded so that higher scores reflected greater collective self-esteem. Summed scores were divided by the number of items for each scale in order to obtain a mean total score for each participant.

**Identity Salience.** In addition to the HICLAS approach, the study assessed identity salience using a method developed by Thoits (1995) in a study of identity, stress, and mental health outcomes. Respondents complete 12 items which asked "Am I a(n) \_\_\_\_?" requiring them to nominate 12 self-descriptive, identities, roles, or traits. They were required only to include their gender, race/ethnicity, and sexual orientation and could freely nominate 9 other

aspects of themselves. These were open-ended self-elicited identities. Respondents were then asked to choose among the self-elicited items those identities that were most important to them. The respondents were asked “Suppose you had to sort these things into three groups – most important to you, second most important to you, and third most important to you – which would you pick as most important to you? You can tell me as many as three or none at all, if you wish.” Similar instructions are given to elicit the second and the third most important identities. Salience was “the perceived importance of roles which respondents had indicated were self-descriptive” (Thoits, 1995: 74). Identities were then given a score of 3 for the most important rank, 2 for the second most important rank, 1 for the third most important rank, and 0 for those that were nominated, but not ranked.

Self Esteem. Taken from Rosenberg (1965), this 10-item scale contains statements ranging from those which assess positive sentiments (e.g., “I feel that I have a number of good qualities”) to those that explore negative perceptions of self (e.g., “I feel I do not have much to be proud of”). Responses are rated on a 4-point scale (“strongly agree” to strongly disagree”). This scale has been widely used and has shown good internal consistency and test-retest reliability, and convergent (with other measures of self esteem) and discriminant (using grade point average, scholastic aptitudes) validity as well (Blascovich & Tomaka, 1991). The measure was internally consistent at baseline ( $\alpha = .8603$ ). Responses were coded so that higher scores reflected greater self-esteem. Summed scores were divided by the total number of items in order to obtain mean total scores for each participant.

Strength of Group Identity. Following Williams et al. (1999), the study measured strength of group identity on a 4-point scale as the extent to which respondents indicated that they feel close in their ideas and feelings to groups based on their sexual orientation (i.e., gay

community), race/ethnicity (African American, Latino communities), or gender (the feminist community). Each group identity was assessed using 1 item only. Possible responses ranged from 1 (“very close”) to 4 (“not close at all”). Responses were recoded so that higher scores reflected stronger group identities.

### *Coping and Social Support*

**Connectedness to the Gay Community.** An 8-item scale, adapted from Mills et al. (2001) asked respondents to assess on a scale of 1 (“agree strongly”) to 4 (“disagree strongly”) how “connected” they felt to the gay community. For example, some items include: “Participating in NYC’s LGBT community is a positive thing for you” and “I really feel that any problem faced by NYC’s LGBT community are also my problems.” The scale was modified to account for a more geospecific definition of gay community. To better aid the respondents in answering these questions, they were given a definition of gay community by the interviewer which states, “I don’t mean any particular neighborhood or social group, but in general, groups of gay men, bisexual men and women, and lesbians.” Responses were coded so that higher scores reflected greater connectedness to the gay community. The measure was internally consistent at baseline with an alpha of .80. Summed scores were divided by the number of items in order to obtain a mean total score for each participant.

**Mastery.** Mastery was assessed using a 7-item scale developed by Pearlin and Schooler (1978). Respondents were asked to rate the degree to which they agreed with statements regarding the extent to which they felt they had control over certain aspects of their lives. Examples include: “You have little control over the things that happen to you” and “You often feel helpless in dealing with problems in life.” Responses were given on a 3-point scale (“not true,” “somewhat true,” and “very true”). They were coded so that higher scores reflected greater mastery. The instrument had been shown to be highly reliable in prior studies and was

adequately reliable at baseline ( $\alpha = .6359$ ). Summed scores were divided by the total number of items in the scale to obtain a mean total score for each participant.

**Participation in Minority Communities.** This instrument assessed the various groups and integration the participant had with the minority groups under study (i.e., sexual, gender and ethnoracial). The 9-item preliminary questions asked respondents to state whether or not (yes/no) they have attended meetings or participated in some other way in different organizations and clubs in the past 12 months. These included things like professional or business meetings, a gym or health club, and religious congregation. If respondents answered yes to any of the preliminary questions, they were then asked to identify if the group or organization they attended was heavily attended by similar others (e.g., if a Latino gay man participated in a professional organization, he would be asked if that organization was heavily attended by other LGBs and Latinos). If the participant was female, she was asked whether or not women heavily attend these same groups. These follow-up questions were also dichotomous yes/no responses.

**Social Network Characteristics and Social Supports.** The study included an instrument adopted from Fisher (1977) by Martin & Dean (1987) for use in gay/bisexual men to assess social support. Respondents provided the first name or initials of individuals who provided them with support in various capacities and domains in the year prior to the interview. The areas of support included such things as: help with household projects or tasks, social companionship, discussion of personal worries, and borrowing money. For each person named in respondents' support networks, respondents were asked basic demographic information regarding the person's gender, sexual orientation, relationship, race/ethnicity, age, educational level, and whether or not the individuals currently live with them. This measure allowed identification of the following variables: network size, number of instrumental supporters, number of emotional supporters, task

coverage (number of support areas covered), and network heterogeneity (gender, ethnicity, and sexuality).

*Potential Confounders and Effect Modifiers*

Coming Out Milestones. Based on a study by Martin and Dean (1987), this 7-item measure required respondents to indicate the age they experienced significant milestones in their coming out process, including the (a) age at which they first were attracted to people of the same gender, (b) realized that they were LGB, (c) had an intimate relationship with persons of the same gender, (d) first told a family member, (e) LGB friends, and (f) straight friends that they were LGB and (g) when it was clear to them that someone in their family had found out that they were [LGB] before they told them. This measure was included to place stressors in the context of important coming out milestones in the lives of LGB persons associated with coming out processes.

Another variable reflecting participants' time since coming was constructed based on these responses. The age at which they completed the coming out milestone was subtracted from their age at time of participation in order to obtain the number of years it has been since they completed each milestone.

Economic conditions. Per capita income and debt to asset ratio were assessed using items adapted from Conger et al. (2002). Gross household income from all sources is divided by the number of household members to obtain per capita income, along the guidelines used by the U.S. Department of Health and Human Services. The debt to asset ratio measure asked respondents to assess their total liabilities as well as their total assets; these quantities were summed and divided by family size to create an indicator of per capita debt to asset ratio. To help prevent the introduction of a self-report bias, respondents were given a laminated card from

which they were allowed to select a letter (“A”-“JJ”) corresponding to range which best represented these figures.

**History of Illness.** The study included a measure to assess past-year and lifetime prevalence of 22 disorders that were possibly influenced by stress, including hypertension, respiratory diseases, colds and flues, cold sores, headaches, stomach aches, GI track disorders (e.g., irritable bowel syndrome), asthma, allergies, eczema, and acne. This also assessed participant’s HIV status and whether they have been diagnosed with AIDS. All questions were prefaced with the question “Have you ever been told by a doctor or health care professional that you have...?” Response options were limited to “yes” or “no.” To maintain confidentiality, respondents were instructed to complete this section on their own using computer assisted software.

**Physical Health.** The measure of physical health was adapted from the SF-36, which was designed to assess general mental and physical health, bodily pain, role limitations, social functioning, and vitality and has been used in numerous surveys and has norms for the U.S. general population (McDowell & Newell, 1996). This study used a shortened version (i.e., SF-12). This scale assessed the same measures with improved wording and response categories (Ware et al., 2002). For example, one item read “During the past 4 weeks, how much of the time have you accomplished less than you would like with your work or other regular activities as a result of any emotional problems?” Responses ranged from 1 = “all of the time” to 5 “none of the time”. All responses were coded so that higher scores reflected better general health. This instrument was self-administered during the interview.

**Religion.** Questions from the Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research (Fetzer Institute, 1999) were included to

assess participants' religious preference, service attendance, private prayer frequency, the extent to which they consider themselves a religious person and the extent to which they consider themselves to be a spiritual person. Attendance and private prayer frequency were measured on a scale of 0 = "never" to 7 = "once a day". Religiosity and spirituality were measured on a scale of 0 = "not at all" to 3 = "never". Participants also indicated whether the services they attend were targeted towards gay and lesbian individuals.

### *Qualitative Interview*

A semi-structured interview expanded upon previous assessments for qualitative exploration of how respondents experience stress and identity, and how individuals maintain psychological health in response to stress. The interview probed respondents' subjective experiences and personal narratives of stressful events and the role of identity in influencing responses to stress. In addition, the interview was included to provide a means to more fully explore how individuals maintain psychological resilience in the face of life stressors, thereby complementing quantitative data analysis in the proposed study that examined psychological well-being as a secondary outcome measure. The narrative portion of the interview was audio taped and transcribed verbatim. This portion of the interview allowed the participant to give a narrative of their life experiences. The narrative involved probes by interviewer to ensure the coverage of central themes, but allowed for each participant's own perspective to emerge. The interviewer also asked the respondents to express their thoughts about the quantitative identity measures (i.e., what they thought was missing from it, and how they would augment their responses to the quantitative questions). Specifically, the interview assessed how respondents described stress (e.g., attributions of discrimination and prejudice regarding various identities), how they experience LGB and non-LGB identities as related to coping with stress (e.g., the importance of and relationship among ethnic, vocational, educational, or family identities in

either creating or resolving stress), and how they have attempted to maintain a positive attitude when experiencing stress.

A visual aid was included to elicit information from the participant. Similarly resembling a sun and its rays, the central circle of the aid was noted as “Me.” The various rays around this circle were the identities and realms of life the participant may associate with themselves. The participant was encouraged to visually depict their various roles and identities. From this, themes were then covered in the interview which assessed the aforementioned issues of concordance of identities and resiliency issues of the respondents. Themes that would be covered included: (a) Stress - For example, what do you find stressful in your life? Can you describe some examples? What made them so difficult/upsetting? Why do you think this happened to you? How do you try to maintain a positive attitude in the face of stress(ors)? What gives you strength?; and (b) Identity - For example, what do you think about the identity and attitudes task? Tell me more about the identities you mentioned and the way you described them? Which of these identities and roles are most important to you (prominence)? Which are positive and which are negative (valence)? In what ways are they important to you? How do these identities (and which ones) help you cope during difficult times? How do these identities “get along with each other” Do any of them create conflicts? Do any of them feel like they “stick out” or don’t fit with the others?

For the final question of the interview, respondents were asked what they feel their life would be like without homophobia, sexism, or racism. This item was used as it allowed for a juxtaposition of how the participant felt their lives were at the time of the interview, and how their lives might be (e.g., different employment situations, relationships, residence, etc.) given the absence of institutionalized social forces. Qualitative interviews were scheduled for 57

individuals for baseline only. Of this 57, 4 to 6 interviews were conducted for each of the LGB cells (no heterosexual qualitative interviews were conducted).

## References

- Allen LA, Woolfolk RL, Gara M, & Apter JT (1996). Possible selves in major depression. *Journal of Nervous and Mental Disorders*, 184, 739-45.
- The American Association for Public Opinion Research (2005). *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. Accessed Online at: [http://www.aapor.org/pdfs/standarddefs\\_3.1.pdf](http://www.aapor.org/pdfs/standarddefs_3.1.pdf).
- Blascovich J, & Tomaka J (1991). Measures of self-esteem. In JP Robinson, PR Shaver, et al. (Eds) *Measures of personality and social psychological attitudes. Measures of social psychological attitudes*, Vol. 1; pp. 115-60. San Diego, CA: US Academic Press, Inc.
- Conger, R. D., Wallace, L. E., Sun, Y., Simmons, R. L., McLoyd, V. C., Brody, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, 38, 179-193.
- Dohrenwend BP (2004). Conceptualization and measurement of major stressful events over the life course. Reference type: unpublished work.
- Dohrenwend BP, Raphael K, Schwartz S, Stueve A, & Skodol A (1993). The structured event probe and narrative rating method for measuring stressful life events. In *Handbook of Stress: Theoretical and Clinical Aspects*, 2nd edition; pp. 174-99. New York: Free Press.
- Fetzer Institute (1999). *Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research: A Report of the Fetzer Institute/National Institute on Aging Working Group*. Kalamazoo, MI: Fetzer Institute.
- Fisher, C. S. (1977). Network analysis and Urban Studies. In C. S. Fisher et al. (eds.) *Networks and Places: Social Relations in the Urban Setting*, pp 19-37. New York: The Free Press.

- Herek GM, & Glunt EK (1995). Identity and community among gay and bisexual men in the Aids era: Preliminary findings from the Sacramento Men's Health Study. In GM Herek & B Greene (Eds.), Vol. 2: Aids, identity, and community; pp. 55-84. Thousand Oaks, CA: Sage.
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., & Walters, E. E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Arch.Gen.Psychiatry*, 62, 593-602.
- Kessler RC, & Ustun TB (in press)(a). The World Mental Health Survey Initiative Version of the World Health Organization Composite International Diagnostic Interview. *The Int Journ of Methods and Psych Res.*
- Kessler RC, Abelson J, Demler O, Escobar JI, Gibbon M, Guyer ME, Howes MJ, Jin R, Vega WA, Walters EE, Wang P, Zaslavsky A, & Zheng H (in press)(b). Clinical calibration of DSM-IV Diagnoses in the World Mental Health Version of the World Health Organization Composite International Diagnostic Interview. *The Int Journ of Methods in Psych Res.*
- Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen HU, & Kendler KS (1994). Lifetime and 12-month prevalence of DSM-II-R psychiatric disorders in the US. Results from the National Comorbidity Survey. *Arch of Gen Psych*, 51, 8-19.
- Kessler RC, Mickelson KD, & Williams DR (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the US. *Journ of Hlth and Soc Behav*, 40, 208-30.

- Krieger N, & Sidney S (1996). Racial discrimination and blood pressure: The CARDIA study of young black and white adults. *Am Journ of Pub Hlth*, 86, 1370-8.
- Laumann EO, Gagnon JH, Michael RT, & Michaels S (1994). *The social organization of sexuality: Sexual practices in the US*. Chicago: The Univ of Chicago Press.
- Link BG (1987). Understanding labeling effects in the area of mental disorders: An assessment of the effects of expectations of rejection. *Am Soc Rev*, 52, 96-112.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin*, 18, 302-318.
- Martin JL, & Dean L (1987). Summary of measures: Mental health effects of Aids on at-risk homosexual men. Reference type: Unpublished work.
- McDowell I, & Newell C (1996). *Measuring health: A guide to rating scales and questionnaires*, 2nd edition. New York: Oxford Univ Press.
- Meyer IH (1995). Minority stress and mental health in gay men. *Journ of Hlth and Soc Behav*, 36, 38-56.
- Meyer IH, & Colten ME (1999). Sampling gay men: Radom digit dialing versus sources in the gay community. *Journ of Homosex*, 37, 99-110.
- Meyer, I. H., Rossano, L., Ellis, J. M., & Bradford, J. (2002). A brief telephone interview to identify lesbian and bisexual women in random digit dialing sampling. *Journal of Sex Research*, 39, 139-144.
- Mills, T. C., Stall, R., Pollack, L., Paul, J., Binson, D., Canchola, J., & Catania, J. A. (2001). Health-related characteristics of men who have sex with men: A comparison of those living in "gay ghettos" with those who live elsewhere. *American Journal of Public Health*, 91, 219-229.

- Mohr, J., and Fassinger, R. (2000). Measuring dimensions of lesbian and gay male experience. *Measurement and evaluation in counseling and development*, 33, 66-90.
- Pearlin LI, & Schooler C (1978). The structure of coping. *Journal of Health and Soc Behavior*, 19 (1), 2-21.
- Radloff LS (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psych Meas*, 1 (3), 385-401.
- Roberts RE, & Vernon SW (1983). The Center for Epidemiologic Studies Depression Scale: Its use in a community sample. *Am Journal of Psych*, 40 (1), 41-6.
- Rosenberg S (1976). New approaches to the analysis of personal constructs in person perception. *Nebraska Symposium on Motivation*, 24, 179-242. Lincoln, NE: Univ of Nebraska Press.
- Rosenberg S, & Gara M (1985). The multiplicity of personal identity. In PR Shaver (Ed.), *Self, situation and social behavior. Review of personality and social psychology*; pp. 87-113. Berverly Hills, CA: Sage.
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Ryff CD (1989). Happiness is everything, or is it? Explorations of the meaning of psychological well-being. *Journ of Person and Soc Psych*, 57, 1069-81.
- Ryff CD, & Keyes CLM (1995). The structure of psychological well-being revisited. *Journ of Person and Soc Psych*, 69 (4), 719-27.
- Schulz A, Williams DR, Israel B, Becker A, Parker E, James SA, & Jackson J (2000). Unfair treatment, neighborhood effects, and mental health in the Detroit metropolitan area. *Journ of Hlth and Soc Behav*, 41, 314-32.
- Shontz, F. (1965). *Research methods in personality*. New York: Appleton Crofts.

- Thoits PA (1995). Identity-relevant events and psychosocial symptoms: A cautionary tale. *Journ of Hlth and Soc Behav*, 36, 72-82.
- U.S. Department of Health and Human Services (2000). *Healthy People 2010: Understanding and improving health*. Washington, DC: US DHHS, Gov't Printing Office.
- Ware JE, Kosinski M, Turner-Bowker DM, & Gandek B (2002). Introduction. In *How to score version 2 of the SF-12 Health Survey*; pp. 3-8. Lincoln, RI, & Boston, MA: QualityMetric Inc., & Health Assessment Lab.
- Wheaton B (1999). The nature of stressors. In AF Horwitz & TL Scheid, *A handbook for the study of mental health: Social contexts, theories, and systems*; pp.176-97. Cambridge, UK: Cambridge Univ Press.
- Williams DR, Spencer MS, & Jackson J (1999). Race, stress, and physical health. *Rutgers series on self and social identity*, 2, 71-100. New York: Oxford Univ Press.
- Williams DR, Yu Y, Jackson J, & Anderson N (1997). Racial differences in physical and mental health. *Journ of Hlth Psych*, 2, 335-51.
- Woolfolk RL, Novalny J, Gara M, Allen LA, & Polino M (1995). Self-complexity, self-evaluation, and depression: An examination of form and content within the self-schema. *Journ of Person and Soc Psych*, 68, 1108-20.

Appendix A - Project STRIDE Screening Form

(1) How old are you? Age \_\_\_\_\_

- Under 18
- Between 18-30
- Between 31-59
- Over 60

4.  Something else: (Specify) \_\_\_\_\_

(2) Gender?

- 1.  Male
- 2.  Female
- 3.  Other: (Specify) \_\_\_\_\_

(3) Sex at birth?

- 1.  Male
- 2.  Female
- 3.  Other: (Specify) \_\_\_\_\_

(4) Which would you say best describes your racial background?

- 1.  White
- 2.  Black/African American
- 3.  Spanish, Hispanic, or Latino origin
- 4.  Asian/Pacific Islander
- 5.  Bi/Multiracial/ethnic
- 6.  Other: (Specify) \_\_\_\_\_

(5) How would you describe your sexual orientation?

- 1.  Straight/Heterosexual
- 2.  Lesbian/Gay
- 3.  Bisexual

(6) Do you live in New York City? (in one of the five boroughs)

- 1.  Yes
- 2.  No [skip to 7]
  - a. How long have you resided in NYC?
    - 1.  2 years or more
    - 2.  Less than 2 years  
For how long? \_\_\_\_\_
  - b. Plan to stay in NYC for at least 1 year?
    - 1.  Yes
    - 2.  No
    - 3.  Maybe/Not sure

(7) What is your zip code? \_\_\_\_\_

(8) Intersection of where you live? \_\_\_\_\_

&

(1) Recruitment info preference	(2) Respondent contact info	(3) Interviewer gender
Date: _____	Name: _____	1. <input type="checkbox"/> Male
Staff: _____	Email: _____	2. <input type="checkbox"/> Female
Venue #/Name: _____	Phone: _____	3. <input type="checkbox"/> No
preference or SB Referral/ID: _____	Cell phone: _____	
Notes: _____		

<b>DISPOSITION:</b>		<b>OUT TO:</b>	
ELIGIBLE	1	YXN	JXT GRG ARG
NOT ELIG	2		
HOLD	3 (SPECIFY _____)	<b>STATUS:</b>	
OVERSAMP	4	PENDING	1
		FINAL OUT	3
<b>ASSIGNED:</b>		<b>VENUE TYPE CODE:</b>	
YES	1		

Project STRIDE Calling Form

Log of calls/emails Name of the caller \_\_\_\_\_

Date	Time	Comments
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

Appointment details

Date	Time	Location	Notes
1.			
2.			
3.			

Additional comments (preferences, best time to call, etc.)

---



---

FINAL outcome (mark only ONE number)

1. <input type="checkbox"/> NO OR WRONG CONTACT INFO / NO RESPONSE	5. <input type="checkbox"/> INTERVIEWED
2. <input type="checkbox"/> UNABLE TO SCHEDULE	6. <input type="checkbox"/> NOT ELIGIBLE
3. <input type="checkbox"/> REFUSED	7. <input type="checkbox"/> OVERSAMPLED

Interviewed/final outcome BY: \_\_\_\_\_ Date of Interview/Final Outcome: \_\_\_\_\_

Appendix B.1 – Example Recruitment Flier (Men Only)

**we want  
to hear  
about you**



\* Your input will help in understanding  
problems that face our lesbian, gay  
and bisexual community

\* Participants (ages 18-59) will  
be compensated \$60 per interview

\* You will be interviewed at a  
time and location  
convenient for you

**212/342.1282**

*call or email today for more info and to see if you qualify*



**stride@columbia.edu**



Columbia University  
MAILMAN SCHOOL  
OF PUBLIC HEALTH



**project**



**your thoughts** YOUR EXPERIENCES

**your future** your worries

**your concerns** your hopes your relationships

Appendix B.2 – Example Recruitment Flier (Women Only)




**your thoughts**      *your concerns*  
*your worries*      **YOUR EXPERIENCES**  
*your hopes*  
**your future**      *your relationships*

***we want to hear about you***



- \* Your input will help in understanding problems that face our lesbian, gay and bisexual community
- \* Participant (ages 18-59) will be compensated \$60 per interview
- \* You will be interviewed at a time and location convenient for you

**212/342.1282**

*call or email today, for more info and to see if you qualify*



**stride@columbia.edu**



Columbia University  
MAILMAN SCHOOL  
OF PUBLIC HEALTH

Appendix B.3 – Example Recruitment Flier (Straight Only)



**your thoughts**      **YOUR EXPERIENCES**

**your worries**      *your hopes*

**your future**      *your concerns*

**your relationships**



***We want to hear about you***



**\* Your input will help in understanding problems that face our NYC community**

**\* Participants (ages 18-59) will be compensated \$60 per interview**

**\* You will be interviewed at a time and location convenient for you**

**212/342.1282**

*call or email today for more info and to see if you qualify*



**stride@columbia.edu**



Columbia University  
MAILMAN SCHOOL  
OF PUBLIC HEALTH

Figure 1 – Geographic Location of All Participants by Sexual Orientation

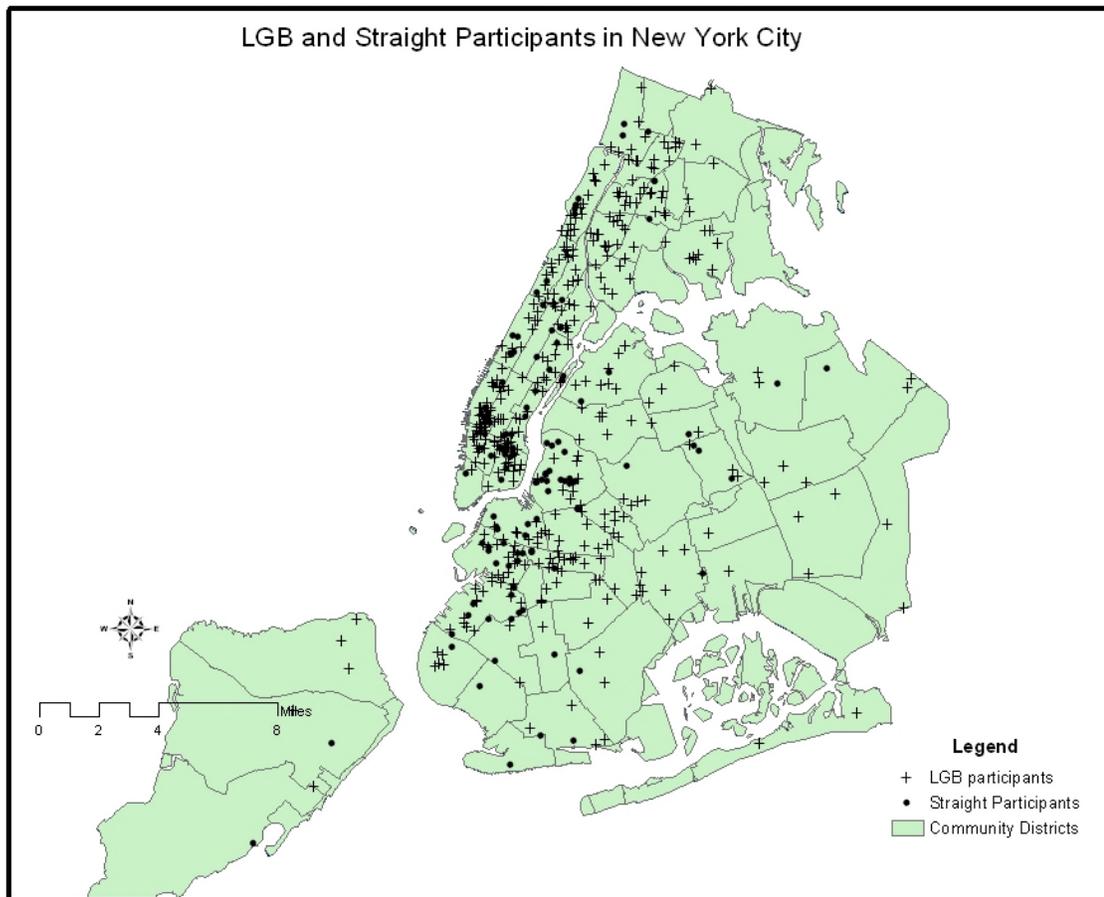


Figure 2 - Geographic Location of LGB Male and Female Participants

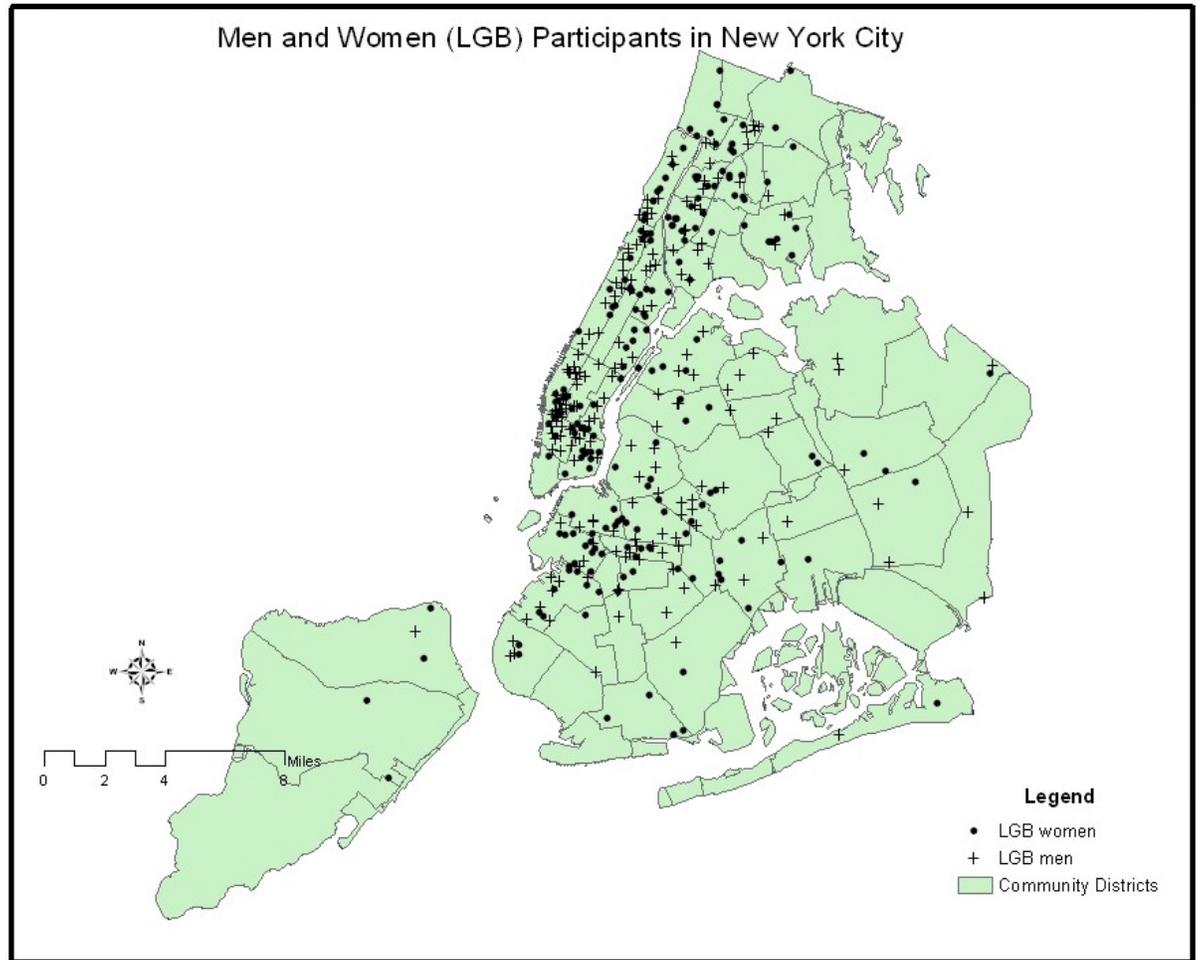


Figure 3 - Geographic Location of LGB White, Black, and Latino Participants

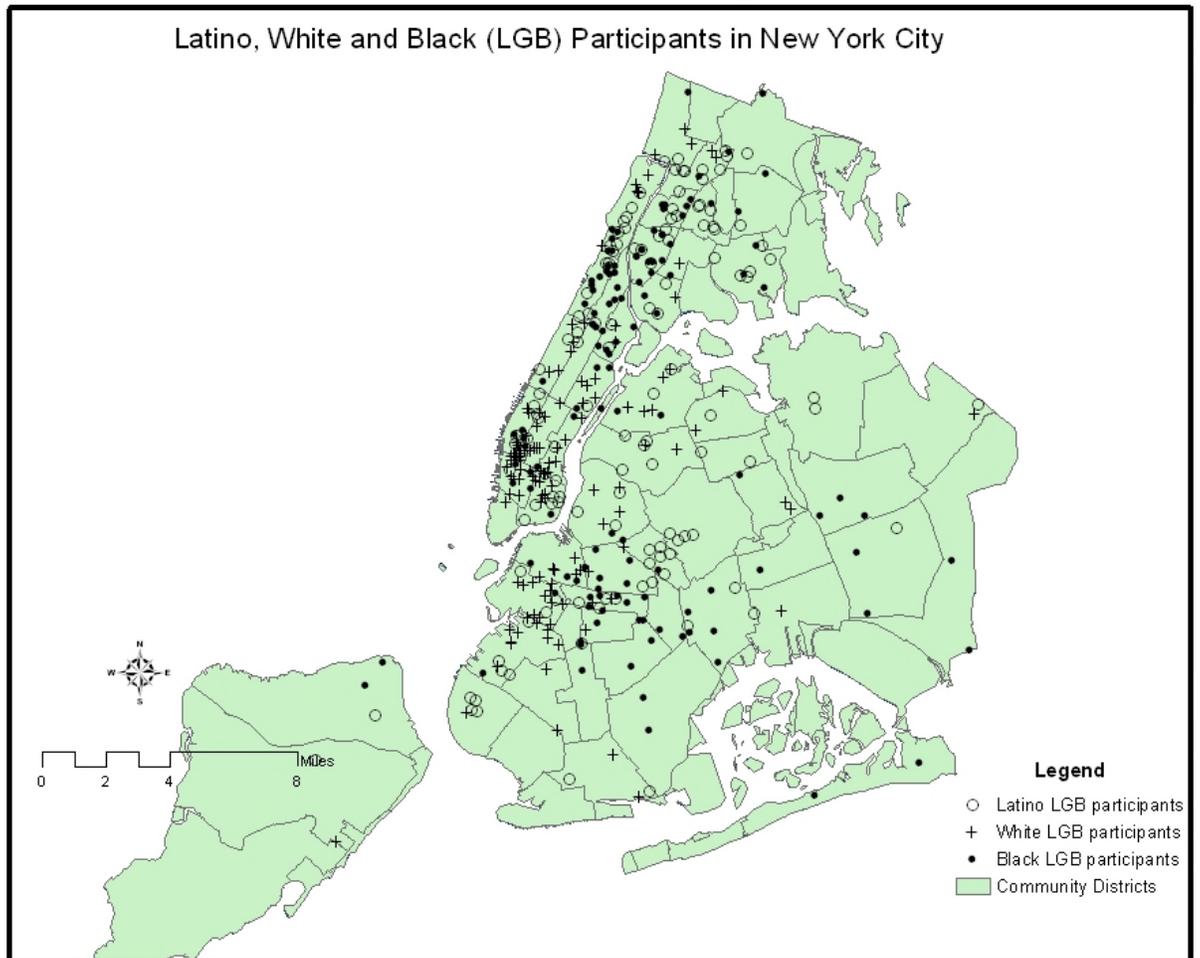
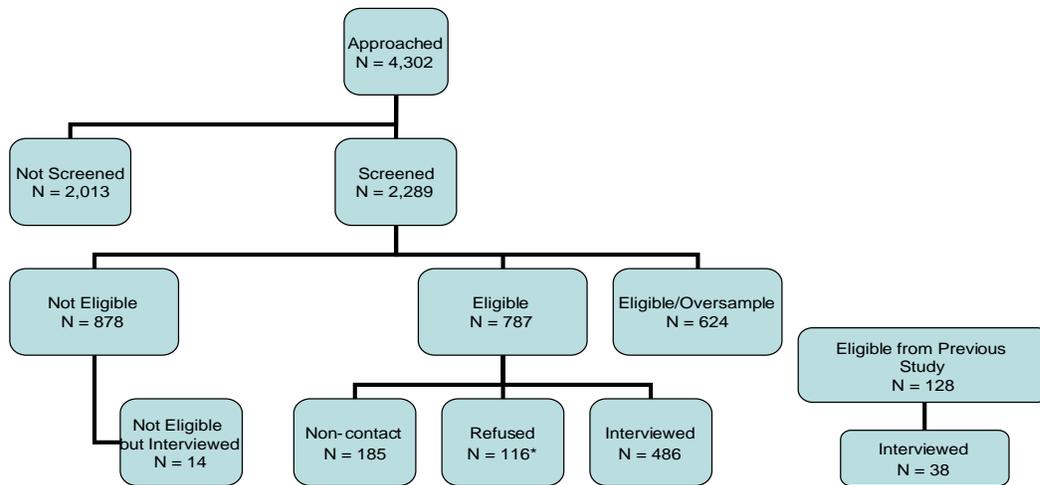


Figure 4 – Breakdown of Recruitment procedures



\* includes 1 partial interview

Table 1 - Project Stride venue classification system

**Table 1: Project Stride venue classification system**

<i>Venue</i>	<i>Venue Type</i>				
	<b>Bar</b>	<b>Non-bar</b>	<b>Outdoors</b>	<b>Organizations</b>	<b>Events</b>
<i>Composition</i>					
<b>Gay</b>	XL Henrietta Hudson Heaven	Big Cup Factory Gay.com	Christopher Street Leather Boutique	Fast N Fab Cycling Group Gay Men's Chorus Las Buenas Amigas at LGBT Community Center	Lesbian Film Festival Black Pride Picnic Pride Awards
<b>Mixed</b>	Ladies Night at Doc Holidays	Toys in Babeland	The Piers 8 <sup>th</sup> Ave	NA	Manhattan Pride Fair Wig Stock
<b>General</b>	NA	Starbucks Crunch Barnes & Noble	Union Square Park Washington Square St. Marks Place	NA	Siren Festival Jewish Film Festival March for Women's Lives

Table 2: Project Stride individuals screened by venue type and composition (N = 2,417)\*

Table 2: Project Stride individuals screened by venue type and composition (N = 2,417)*													
	Bar (n = 412)		Non-bar (n = 246)		Outdoors (n = 452)		Organizations (n = 192)		Events (n = 593)		Snowball (n = 262)		Total
<i>Venue Composition</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
<b>Gay</b>	409	16.9	53	2.2	0	0	192	8.0	356	14.7	253	10.5	1,263
<b>Mixed</b>	0	0	17	0.1	182	7.5	0	0	146	6.0	6	0.1	351
<b>General</b>	3	0.1	176	7.3	270	11.2	0	0	91	3.8	3	0.1	543

\* Percentages may not add up to 100 because of rounding. Includes 222 (9.2%) referrals and 38 (1.6) missing.

Table 3: Outcome Rates for Project Stride Recruitment

Subgroups	Type of Outcome Rate	
	Response <sup>1</sup>	Cooperation <sup>2</sup>
Straight White Men	0.60	0.83
Straight White Women	0.77	0.88
Gay White Men	0.56	0.75
Gay White Women	0.59	0.82
Gay Black Men	0.65	0.77
Gay Black Women	0.57	0.82
Gay Latino Men	0.59	0.74
Gay Latino Women	0.56	0.79
TOTAL	0.60	0.79

1 – interviewed / (interviewed + refusal + non-contacts + partial)

2 – interviewed / (interviewed + refusal + partial)

NOTE: Equations used in rate calculations were obtained from AAPOR (2005)

Table 4 - Project Stride respondents by recruitment source (N = 523)\*

Table 4: Project Stride respondents by recruitment source (N = 523)\*

	Straight White				LGB White				LGB Black				LGB Latino			
	Men (n = 65)		Women (n = 63)		Men (n = 67)		Women (n = 67)		Men (n = 67)		Women (n = 64)		Men (n = 64)		Women (n = 66)*	
<i>Venue Type</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
<b>Bar</b>	0	0	0	0	16	24	13	19	5	8	8	13	12	19	21	32
<b>Non-Bar</b>	12	19	10	16	8	12	4	6	4	6	0	0	5	8	2	3
<b>Outdoor</b>	27	42	27	43	6	9	4	6	11	16	11	17	7	11	2	3
<b>Organizations</b>	0	0	0	0	10	15	13	19	6	9	6	9	11	17	8	12
<b>Events</b>	10	15	11	18	11	16	21	31	21	31	19	30	12	19	16	24
<b>Snowball</b>	16	25	13	21	10	15	8	12	12	18	8	13	4	6	9	14
<b>Referral</b>	0	0	2	3	6	9	4	6	8	12	12	19	13	20	8	12

Note: Percentages may not add up to 100 because of rounding.

\* Recruitment data is missing for 1 Gay Latina participant.

Table 5: Demographics for the Total Stride Sample (N = 524)

	Straight White Men (n = 65)		Straight White Women (n = 63)		GB White Men (n = 67)		LB White Women (n = 67)		GB Black Men (n = 67)		LB Black Women (n = 64)		GB Latino Men (n = 64)		LB Latina Women (n = 67)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age	31.75	9.75	31.54	9.02	34.04	10.08	32.37	9.76	31.34	7.66	31.86	9.41	31.91	8.61	33.01	9.78
	n	% n	n	% n	N	% n	n	% n	n	% n	n	% n	n	% n	n	% n
Employment Status																
Employed	42	64.6	52	82.5	56	83.6	52	77.6	48	71.6	40	62.5	46	71.9	44	65.7
Unemployed (non-stud)	18	24.6	3	4.8	5	7.5	5	7.5	11	16.4	15	23.4	15	23.4	13	19.4
Student	10	15.4	14	22.2	12	17.9	21	31.3	10	14.9	16	25.0	4	6.3	11	16.4
Other	2	3.1	2	3.2	4	6.0	1	1.5	7	10.4	7	10.9	9	14.1	9	13.4
Education Level																
≤ High School Diploma	8	12.3	3	4.8	10	14.9	3	4.5	17	25.4	18	28.1	18	28.1	20	29.8
Relationship Status																
In a Relationship >1yr	21	32.3	14	22.2	14	20.9	22	32.8	9	13.4	25	39.0	10	15.6	18	26.9
Parental Status																
Have Children	6	9.2	5	7.9	1	1.5	3	4.5	10	14.9	27	42.2	5	7.8	23	34.4
Live with Children	2	3.1	3	4.8	0	0	0	0	1	1.5	15	23.4	0	0	16	23.9
Immigration																
Born in United States	54	83.1	59	93.7	60	89.6	56	83.6	57	85.1	58	90.6	41	64.1	56	83.6
Net Worth																
Negative	31	47.7	24	38.7	30	45.5	31	48.4	37	56.1	45	72.6	34	56.7	35	53.8

	Total LGB Sample (n = 396)		Total Sample (n = 524)	
	Mean	SD	Mean	SD
Age	32.43	9.24	32.24	9.27
	n	n	n	% n
Employment Status				
Employed	286	72.2	380	72.5
Unemployed (non-student)	64	16.2	85	16.2
Student	74	18.2	98	18.7
Other	37	9.3	41	7.8
Education Level				
≤ High School Diploma	86	21.7	97	18.5
Relationship Status				
In a Relationship >1yr	98	24.7	133	25.4
Parental Status				
Have Children	69	17.4	80	15.3
Live with Children	32	8.1	37	7.1
Immigration				
Born in United States	328	82.8	441	84.2
Net Worth				
Negative	221	55.8	267	52.5

ANOVA Test of Continuous Mean Differences:

Age: F (7, 523) = .622, p = .738.

Pearson Chi-Square Tests of Categorical Differences

Yellow = Low  
Blue = High

Employed: 15.03 (df = 7) p = 0.036  
 Unemployed: 22.81 (df = 7) p = 0.002  
 Student: 17.10 (df = 7) p = 0.017  
 Other: 15.83 (df = 7) p = 0.027  
 Education: 34.51 (df = 7) p < 0.001  
 Relationship: 22.03 (df = 7) p = 0.003  
 Have Children: 77.73 (df = 7) p < 0.001  
 Live with Kids: 19.78 (df = 7) p = 0.006  
 Born in US: 27.24 (df = 7) p < 0.001  
 Neg. Net Worth: 17.71 (df = 7) p = 0.013

Table 6 - Project Stride individuals screened by venue type and composition (N =523)\*

Table 6: Project Stride individuals screened by venue type and composition (N =523)*																
	Bar (n = 75)		Non-bar (n = 45)		Outdoors (n = 95)		Organizations (n = 54)		Events (n = 121)		Snowball (n = 80)		Referral (n = 53)		Total	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Age	31.13	8.37	33.33	9.57	29.87	8.84	36.09	10.90	31.24	9.08	33.56	8.96	33.57	8.76	32.23	9.28
# Org Participations	2.88	1.85	3.16	1.83	2.47	1.59	3.54	1.82	3.08	1.73	2.71	1.82	3.15	1.92	2.94	1.80
# people in SSM	6.13	3.30	7.18	3.43	6.25	2.90	6.87	2.98	6.07	3.08	6.33	3.60	5.51	2.67	6.27	3.16
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
<b>Employment Status</b>																
Employed	56	75%	36	80%	67	71%	38	70%	96	79%	55	69%	31	59%	379	72%
Unemployed (non student)	8	11%	7	16%	14	15%	11	20%	17	14%	14	18%	12	23%	83	16%
Student	16	21%	5	11%	26	27%	4	7%	25	21%	13	16%	9	17%	98	19%
Other	5	7%	2	4%	3	3%	8	15%	6	5%	6	8%	11	21%	41	8%
≤ High School Edu	19	25%	4	9%	14	15%	11	20%	21	17%	19	24%	9	17%	97	19%
In a Rel >1yr	14	19%	8	18%	27	28%	14	26%	37	31%	22	28%	11	21%	133	25%
Have Children	12	16%	6	13%	8	8%	6	11%	17	14%	17	21%	13	25%	79	15%
Live with Children	8	10%	3	7%	3	3%	0	0%	10	8%	7	9%	6	11%	37	7%
Born in United States	59	79%	38	84%	79	83%	45	83%	101	84%	75	94%	43	81%	440	84%
Negative Net Worth	34	46%	19	43%	50	54%	21	40%	69	59%	42	54%	32	64%	267	51%

**ANOVA Test of Continuous Mean Differences:**

Age:  $F(7, 523) = 3.659, p < .001$ .

# orgs  $F(6, 516) = 2.709, p = .013$ .

# of people in SSM  $F(6, 516) = 1.571, p = .153$ .

**Pearson Chi-Square Tests of Categorical Differences**

Yellow = Low Blue = High

Employed:	10.367	(df = 6)	p=0.110
Unemployed:	4.714	(df = 6)	p=0.581
Student:	11.97	(df = 6)	p=0.062
Other:	21.01	(df = 6)	p=0.002
Education:	7.730	(df = 6)	p=0.259
Relationship:	11.76	(df = 6)	p=0.465
Have Children:	10.27	(df = 6)	p=0.114
Live with Kids:	8.687	(df = 6)	p=0.192
Born in US:	7.714	(df = 6)	p=0.250
Neg. Net Worth:	10.60	(df = 6)	p=0.101

Table 7 – Psychometric Properties for Project Stride Measures

Scale	# of Items (Range)	Statistics						<i>Corr t1-t2</i>
		Time 1			Time 2			
		<i>M</i>	<i>SD</i>	alpha	<i>M</i>	<i>SD</i>	alpha	
CES-D <sup>1</sup>	20 [0 (“rarely or none of the time”) to 3 (“most or all of the time”)]	14.01	1.99	.92	14.25	1.67	.91	.47
Connectedness to Gay Community	8 [1 (“agree strongly”) to 4 (“disagree strongly”)]	3.28	.54	.80	3.23	.54	.82	.73
Rosenberg Self-Esteem	10 [1 (“agree strongly”) to 4 (“disagree strongly”)]	1.7	.54	.86	3.37	.53	.86	.73
Stigma	6 [1 (“agree strongly”) to 4 (“disagree strongly”)]	1.92	.77	.88	1.86	.72	.88	.65
Everyday Discrimination	8 [1 (“often”) to 4 (“never”)]				1.99	.6	.85	.59
Internalized Homophobia	10 [1 (“often”) to 4 (“never”)]	1.41	.51	.84	1.37	.46	.83	.77
Mastery	7 [1 (“not true”) to 3 (“very true”)]	2.64	.31	.64	2.68	.28	.62	.64
PERI – Psychological Distress	8 [1 (“never”) to 5 (“very often”)]	--	--	--	--	--	--	--
Guilt	4	2.28	.69	.69	2.21	.68	.75	.53
Sex Problems - Men	4	1.88	.69	.74	1.94	.68	.75	.59
Sex Problems - Women	3	2.35	.88	.71	2.13	.83	.73	.66
Social Well-Being	15 [1 (“strongly agree”) to 7 (“strongly disagree”)]	4.8	.87	.78	4.83	.82	.75	.64
Social Integration	3	4.81	1.51	.77	4.87	1.47	.74	.56
Social Acceptance	3	4.18	1.21	.40	4.14	1.19	.36	.62
Social Contribution	3	5.8	1	.45	5.84	1.05	.55	.53
Social Actualization	3	4.2	1.44	.62	4.2	1.35	.55	.51
Social Coherence	3	5	1.21	.33	5.08	1.2	.4	.6
Psychological Well-Being	18 [1 (“strongly agree”) to 7 (“strongly disagree”)]	5.39	.76	.75	5.46	.79	.77	.7
Self-Acceptance	2	4.76	1.59	.52	4.81	1.7	.62	.62
Purpose in Life	3	5.29	1.18	.25	5.27	1.2	.24	.55
Environmental Mastery	3	4.93	1.26	.55	5.09	1.22	.54	.54
Positive Relations with Others	3	5.25	1.3	.54	5.33	1.3	.49	.57
Personal Growth	3	6.38	.92	.54	6.41	.9	.57	.48
Autonomy	3	5.55	1.07	.46	5.64	1.09	.46	.57
Collective Self-Esteem	15 [1 (“strongly agree”) to 7 (“strongly disagree”)]	5.23	.87	.87	5.25	.87	.86	.6
Membership	4	5.63	1.1	.78	5.66	1.11	.78	.51
Public	3	5	1.12	.70	4.97	1.15	.72	.52
Private	4	5.61	1.06	.80	5.68	1.09	.82	.46
Identity	4	4.62	1.24	.73	4.63	1.29	.73	.5

Table 8 – Measures on which missing value substitutions were made

<b>Measure</b>	<b># of Missing Values</b>	<b>Substitution Method</b>
Net Worth	15	Mode
Internalized Homophobia	4	Mean
Stigma	5	Mean
Chronic Strain	8	Mean
Closet - Co-Workers	5	Mean
Closet - Health Care Provider	1	Mean
Community Connectedness	6	Mean
Mastery	1	Mean

Note: Mode and mean substitutions were made using the value for participants' corresponding subgroups defined by race, gender, and sexual orientation.