



# Mental Health Assessment Town of Lexington 2021

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## **Executive Summary**

In 2018, the Lexington Mental Health Task Force was created as a collaborative, coordinated partnership between municipal and school staff to understand and respond to the mental health needs of the community across the lifespan. The Task Force determined that there is a need in Lexington for:

- A focus on mental health for all residents at every stage of the lifespan.
- A sustainable structure for better coordination of mental health programs and efforts across municipal and school departments.
- Well-defined, mutually agreed upon protocols for collaboration with regard to critical incident response.
- Identifying and/or developing data sources for the systematic, periodic review of the dynamic mental health needs of our residents across the lifespan.
- Structures for storing information about mental health programs and services being offered in Town.
- A consistent mode for communication to all residents such that they can access information about available programs and services on-demand.

While data about the needs of youth in Lexington already existed (see, for example, the *Youth Risk Behavior Survey*, *LPS Self-Injury Suicidal Ideation Response Protocol*), data about the adult population were lacking. The Task Force deemed it a priority to collect data about adults in Lexington. In particular, information identified as a priority included barriers to accessing mental health services, populations that are not being served, and gaps in programs and services.

In 2020, the Town of Lexington's Mental Health Task Force began a partnership with Drs. Marian A.O. Cohen and Ruth Remington, Directors of the Center for Social Research at Framingham State University to develop and

administer a mental health needs assessment for the Lexington community. Using both electronic and hard-copy formats, the questionnaire was accessible to all adult Lexington residents. Assistance completing the questionnaire was available to those who needed it, and copies of the questionnaire in Chinese for those for whom English is not a first language were available upon request.

***Findings:***

Responses were received from 1016 adults in Lexington.<sup>1</sup> Those who responded to the questionnaire represented a cross-section of the Lexington population in terms of key demographic variables (sex/gender, sexual orientation, race/ethnicity, education, income, languages spoken, and living arrangements.)

Almost all respondents said they have health insurance. Self-assessments by respondents of their physical and mental health were, generally, good and there was a strong correlation between physical and mental health assessments. Those who said their physical health was good also said their mental health was good.

The most common physical health problems identified by respondents (for themselves and/or family members) were cancer, endocrine disorders, heart disease and digestive issues. The most common mental health problems identified by respondents (for themselves and/or family members) were depression, anxiety and ADHD.

A sizeable number of respondents said they take prescription drugs. Few said they experience negative side effects, and those are primarily related to the specific type of medication being taken. Drug/substance use in general is low, with alcohol being used most often and recreational drugs being used least often.

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<sup>1</sup> According to 2019 American Community Survey (ACS) findings, the population of those aged 18 and older was 24,302.

When health care was needed, respondents did identify impediments to help-seeking. The barriers cited most often included: long waits for a provider, affordability of care, issues with their insurance, and accessibility of care.

When respondents were asked about stress in their lives, they said the greatest sources were current social or political events, concerns about the future and the effect of the pandemic on various aspects of their lives. Factors causing the least stress were identified as having health insurance, feeding their family and cultural differences/language barriers.

Respondents said they deal with stress by talking with others, exercising or engaging in physical activities, employing stress management techniques, or participating in personal or individualized activities. A number said they ‘ignore it’.

***Recommendations for next steps:***

It is the intention of the Mental Health Task Force to use data collected in this study to identify programs and services needed to address the community’s health needs and barriers to seeking help in order to better serve all residents of Lexington.

Given that the sample of respondents was skewed toward older residents, it is acknowledged that more information may be needed from younger and middle-aged adults. There were also fewer Asian and South Asian residents represented in the sample than exist, by proportion, in the Lexington population.

Since cultural differences/language barriers were cited by a number of respondents with regard to help-seeking for health problems, more information about specific issues in this regard should be sought in order to fully understand the concerns and to direct attention to providing assistance.

Stigma or fear or embarrassment were cited by respondents when discussing mental health. Stigma reduction education and programs to combat stigma and help people deal with stigma would be beneficial to assist help-seeking.

Programs and services to develop include: identifying specific cultural differences/language barriers that hinder help-seeking and assisting residents to overcome these; assistance with understanding insurance plans or programs or coverage; assistance with access to providers; development of cessation and prevention programs with respect to harmful behaviors; stigma reduction/coping education; and stress reduction education and programs.

A number of things would be important to publicize: transportation options; programs and services already available in Lexington to assist residents; and the Mental Health Task Force website.

Overall, the population in Lexington is relatively healthy and interested in measures that will maintain or improve their mental and physical health. The Town is fortunate to have an active Mental Health Task Force committed to the well-being of the residents of Lexington.

## **Introduction**

In 2017, the Town of Lexington experienced the deaths by suicide of two Lexington High School students – one in January 2017 and the other in April 2017. Debriefing after these deaths led municipal and school staff to conclude that there is a need to create sustainable structures and protocols to guide our coordinated response to critical incidents impacting our community. As part of the development of the Town’s response, the Director of Human Services and several members of the Lexington Public Schools (including the Director of Counseling; Assistant Coordinator of Physical Education, Health and Wellness; Director of Health Services; and Director of Planning and Assessment) participated in the Massachusetts Department of Public Health Community Health Network Area (CHNA) *Learning Community Symposium on Preventing Suicide* from October 2017 to January 2018. The symposium provided our team with the opportunity to better understand mental health and suicide among our residents, and examine how our municipal and school mental health prevention and response efforts coordinate with one another. It was an important first opportunity for representative staff across municipal and school departments to examine these issues outside of responding to a specific incident.

In 2018, the Lexington Mental Health Task Force was created as a collaborative, coordinated partnership between municipal and school staff to understand and respond to the mental health needs of the community across the lifespan. Based on what was learned from the symposium and discussions during initial goal-setting regarding work of the Mental Health Task Force, the team concluded that, while there are many programs and resources provided by the Town, there was a clear need for:

- A focus on mental health for **all residents at every stage of the lifespan**. While there were two deaths by suicide among school-age individuals, there were significantly more deaths by suicide in the adult population from 2015-2017 in Lexington<sup>2</sup>. Responding to and addressing mental health challenges are key to suicide prevention.
- A **sustainable structure for better coordination** of mental health programs and efforts across municipal and school departments. This is important to reduce redundancy, increase efficiencies, and free up resources to refocus on unmet needs.
- Well-defined, mutually agreed upon **protocols for collaboration** with regard to critical incident response, with appropriate training and support to ensure implementation with fidelity and consistency. The school, police, and fire departments each have their own critical incident protocols. There is a need, however, for a mutually agreed upon overarching protocol to define shared expectations for how municipal and school staff efforts intersect and coordinate.
- **Identifying and/or developing data sources for the systematic, periodic review of the dynamic mental health needs** of our residents across the lifespan. We have substantial information about youth needs (e.g. *Youth Risk Behavior Survey*, *LPS Self-Injury Suicidal Ideation Response Protocol* data, etc.), but little data pertaining to our adult populations, other than incident data from the police and fire departments. In the absence of adequate adult data, youth data are extrapolated, assuming similar needs within the adult population, without basis for doing so. In fact, rates of mental illness among youth

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<sup>2</sup> According to the Lexington Police Department, there were 11 adult suicides during this period.



and adults have been noted to be different<sup>3</sup> and types of self-injurious behaviors among youth and adults may be different from one another.

- **Structures for storing information about mental health programs and services** being offered in Town, as well as a consistent mode for communication to all residents such that they can access this information on-demand.

In order to address the identified needs, the Mental Health Task Force secured a 3-year implementation grant from CHNA-15<sup>4</sup>. Collecting data about adult populations, with regard to barriers to accessing mental health services, populations that are not being served, and gaps in programs and services was a priority. Discussions were held with the Director of Planning for the Lexington Public Schools, Health Director for the Town, and Health Services Director for the Schools. It was determined that a consultant was needed to implement a Mental Health Needs Assessment that would facilitate data collection and identify needs of adult populations.

In 2020, the Town of Lexington's Mental Health Task Force began a partnership with the Center for Social Research at Framingham State University to develop and administer a mental health needs assessment for the Lexington community. The mental health questionnaire, in both electronic and hard-copy formats, was open for 6 weeks and accessible to all adult Lexington residents. A postcard was mailed to every household promoting the questionnaire. Additionally, the study was promoted on social media, in print, and on email distribution lists. The Mental Health Task Force, with leadership

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<sup>3</sup> 1 in 5 U.S. adults experience mental illness each year. 1 in 6 U.S. youth aged 6-17 experience a mental health disorder each year. 50% of all lifetime mental illness begins by age 14, and 75% by age 24. Source: <https://www.nami.org/mhstats>

<sup>4</sup> CHNA-15 refers to the Community Health Network Area and the 27 areas served across the Commonwealth <https://www.chna15.org>

from Municipal and School staff, will use data collected in this study to identify programs and services to address the needs and barriers to help-seeking in order to better serve all residents of Lexington.

The following pages present the findings from the Town-wide assessment study.

## Section I. Demographic Questions

Charts with the distribution of responses in the sample to demographic questions are in Appendix I.

Comparison charts for sample responses and the population of Lexington as recorded in the U.S. Census are in Appendix II.

The majority of respondents (97.2%) are **Lexington residents**. Those who were assigned the **sex** of female at birth represent 68.4% of the sample, with 67.9% of the sample identifying as female. The majority of the sample (92.0%) described their **sexual orientation** as straight/heterosexual. (Other sexual orientations, i.e., gay, lesbian, bisexual, questioning/not sure, queer, asexual and 'other' were selected by 3% or less of the sample.)

The **age** of respondents ranged from younger than 20 to older than 89, with the mean age of 58.6. The majority of respondents were between the ages of 40 and 79, with the distribution of ages conforming to a normal curve.

The majority of respondents (70.8%) identified their **race/ethnicity** as White/Caucasian; 8.6% identified as Asian; 5.2% as South Asian; 2.6% as Hispanic or Latino/a/x; 1.4% as Black or African American; 0.4% as Middle Eastern or Arab American. A small percentage of respondents (2.2%) identified themselves as being of multi-race/ethnicity.<sup>5</sup> As compared with data from the American Community Survey, the sample has a greater percentage of White/Caucasian respondents and fewer Asian and multi-racial/ethnic respondents. Percentages of Black/African American and Hispanic/Latino/a/x respondents are comparable to the American Community Survey data.

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<sup>5</sup> According to the 2019 American Community Survey, 63.8% of the population in Lexington is White alone; 30.1% is Asian (including Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, and 'other' alone; 2.1% is Hispanic; 1.3% is Black or African American; those identifying two or more races is 3.7%.

The majority of respondents **live with** a spouse (62.0%) or with a partner (2.6%). A sizeable percentage of respondents live with a child or children under the age of 18 (29.1%) or with a child or children over the age of 18 (17.2%). Some respondents (5.2%) live with parents or (0.3%) with grandparents. Still other respondents (7.6%) live with another adult (including a roommate, a 'long term guest', au pair or nanny, sibling, cousin, or adult child and a spouse/partner and grandchild).

English was reported as the primary **language spoken** by more than three-fourths of the respondents. Asian and South Asian languages spoken were reported by 3.2% of respondents. In addition, French, Greek, Hebrew, Portuguese, Spanish, Russian, Turkish, and Serbian were cited. English plus another language was noted by a small number of respondents. No information on primary language spoken was provided by 18.8% of respondents.

Respondents were well **educated**, with 66.6% having earned a Master's degree or higher (and 19.3% having earned a doctoral degree and 7.9% having earned a professional degree). Those with a college degree represented 20.3% of the sample. The percentage of respondents with higher degrees (Master's degrees, Ph.Ds., or professional degrees) is greater than what is reported in the American Community Survey.<sup>6</sup>

The majority of respondents said their **household income** (from all sources) in 2020 was between \$100,000 and \$299,999, with 9.1% saying household income was \$500,000 or more. Mean income for the sample was \$257,740.<sup>7</sup> The mean income is comparable to the mean income reported in the American Community Survey.

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<sup>6</sup> According to the 2019 American Community Survey, 57.2% of residents over the age of 25 earned a graduate or professional degree. Those with a Bachelor's degree made up 27.5% of the population in Lexington.

<sup>7</sup> According to the 2019 American Community Survey, 55% of Lexington residents earned \$200,000 or more, with a mean income of \$268,155.

Respondents reported that they did not experience homelessness (96.3%), had not experienced being evicted from their place of residence (97.4%) and were not concerned about their ability to feed themselves or their families (90.6%).

Almost all (99.5%) respondents had **health insurance**. Almost half (49.7%) had insurance through themselves, their spouse, or their parents' employer or union; 10.9% had insurance purchased directly from an insurance company or health insurance marketplace; 29.0% had Medicare; 4.1% had Medicaid or MassHealth; 1.1% had a form of military insurance.<sup>8</sup>

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<sup>8</sup> According to the 2019 American Community Survey, 99.1% of the civilian noninstitutionalized population in Lexington had health insurance, with 68.0% with employer-based insurance, 6.1% with direct purchase insurance, and 0.5% of the population with a form of military related insurance. 17.8% had Medicare and 6.8% had Medicaid or a means-tested form of public insurance.

## Section II. Overall Health

Questions in this section were divided into physical health and mental health.

### ***Physical health***

When asked to characterize their **physical health status**, 65.9% said their health was ‘excellent’ or ‘very good’. Only 1.0% said their health was ‘poor’. While the majority of respondents (58.1%) said their health had ‘remained the same’ over the last five years, a sizeable percentage (33.7%) said their health had ‘gotten worse’.

Sex, age and race/ethnicity were not statistically significantly related to assessment of physical health status. However, those with household incomes of \$400,000 or more were more likely to say their physical health was ‘excellent’ or ‘very good’ ( $G=-.232$ ;  $p=.000$ ), as were those with professional or doctoral degrees ( $G=-.187$ ;  $p=.000$ )<sup>9</sup>.

Some respondents said their **physical health interfered** with their ability to engage in activities (reported in percentages):

Engage in hobbies/recreational activities	12.8
Perform household chores	7.5
Engage in normal social activities	5.4
Engage in employment and/or volunteer work	4.7
Run errands or go shopping	3.7
Take care of themselves	3.6
Take care of family or fulfill expected family role obligations	3.2

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<sup>9</sup> In this report, Gamma (G), for variables measured at the ordinal level, and Cramer’s V (V), for variables measured at the nominal level, are the measures of association used to examine the relationship between two variables. The value of the measure of association explains how much of the variance in the dependent variable is accounted for by the particular independent variable. For example, a value of .232 means that 23.2% of the variance in self-assessment of physical health is explained by household income.

While physical health limited activities for some respondents, 59.8% said they are not limited by their physical health.

The primary **source for physical health care or advice** was identified as (reported in percentages\*):

Primary care provider	75.5
Specialist	20.6
Family member	10.0
Urgent care center	9.8
Online resource or social media	9.8
Friend	4.8
Complementary/alternative practitioner	3.9
Emergency room at a hospital	3.8
'Other' (included prayer, life coach, massage)	1.8
Clinic	1.3
Faith leader	0.2

\*Percentages do not add to 100 due to multiple selections by respondents.

A small number (1.0%) of respondents said they don't seek physical health care.

When asked about **challenges** respondents might encounter in seeking professional help with physical health issues, 51.1% said there were no challenges. Other respondents, however, identified the following (reported in percentages).

Long waits for a provider	12.2
Affordability	7.2
Insurance issues	6.6
Accessibility	4.9
'Other' (including COVID-19 concerns, discomfort/shame/embarrassment, changes in coverage plans)	4.1
Transportation	4.0
Inability to find providers with experience regarding particular needs	3.8
Finding time/too busy schedules	2.2
Cultural differences/language barrier	1.2

- *Females* were far more likely than were males to cite challenges to seeking professional help for physical health issues.
- Challenges were seen most often among those *aged* 40-49, with the exception of transportation, which was a challenge for those aged 70 and older.
- Those with at least a *Master's degree* identified more challenges than did those with less education, except for the challenge of cultural differences/language barrier, seen more often among those with a college degree.
- Those with *household incomes* less than \$100,000 identified affordability, transportation, and inability to find providers with appropriate experience as most challenging.
- Among *White* respondents, the three greatest challenges were
  - transportation,
  - long waits for a provider, and
  - insurance issues.
- Among *Asian* respondents, the three greatest challenges were
  - cultural differences/language barriers,
  - inability to find providers with appropriate experience, and
  - affordability.
- Among *South Asian respondents*, the three greatest challenges were
  - cultural differences/language barriers,
  - insurance issues, and
  - long waits for a provider.
- Among *Black* respondents, the three greatest challenges were
  - cultural differences/language barriers,
  - transportation, and
  - accessibility.



- Among *Hispanic* respondents, the three greatest challenges were
  - cultural differences/language barriers,
  - accessibility, and
  - inability to find providers with appropriate experience.
- Among *Middle Eastern* respondents, the three greatest challenges were
  - insurance issues,
  - inability to find providers with appropriate experience, and
  - long waits for a provider.
- Among those identifying with multiple races/ethnicities, the three greatest challenges were
  - accessibility,
  - affordability, and
  - inability to find providers with appropriate experience.

### ***Mental Health***

When asked to characterize their **mental health status**, 58.7% said their health was ‘excellent’ or ‘very good’. Only 2.9% said their health was ‘poor’. While the majority of respondents (64.1%) said their mental health had ‘remained the same’ over the last five years, a sizeable percentage (27.3%) said their mental health had ‘gotten worse’.

Those most likely to characterize their mental health status as ‘excellent’ or ‘very good’ were males ( $V=.156$ ;  $p=.001$ ); respondents aged 50 and older ( $G=-.355$ ;  $p=.000$ ); those with household incomes of \$300,000 or more ( $G=-.097$ ;  $p=.010$ ); those with professional or doctoral degrees ( $G=-.220$ ;  $p=.000$ ); and Whites, Asians and South Asians ( $V=.124$ ;  $p=.002$ ).

Some respondents said their **mental health interfered** with their ability to engage in activities (reported in percentages):

Engage in normal social activities	12.1
Engage in hobbies/recreational activities	10.5
Take care of themselves	8.6
Engage in employment and/or volunteer work	7.8
Perform household chores	7.5
Take care of family or fulfill expected family role obligations	6.2
Run errands or go shopping	4.4

While mental health limited activities for some respondents, 55.4% said they are not limited by their mental health.

The primary **source for mental health care or advice** was identified as (reported in percentages\*):

Therapist/counselor/psychologist/social worker	26.9
Friend	21.2
Family member	19.7
Primary care provider	19.0
Psychiatrist	9.2
'Other' (included prayer, AA, meditation, self-help)	4.4
Online or phone-based resource/support	3.4
Faith leader	3.3
Complementary/alternative practitioner	2.2
Have no need	0.8
Crisis team	0.6
Emergency room at a hospital	0.5
Day program	0.5
Urgent care center	0.2
Clinic	0.2

\*Percentages do not add to 100 due to multiple selections by respondents.

A sizeable number (20.7%) of respondents said they do not seek mental health care.

When asked about **challenges** respondents might encounter in seeking professional help with mental health issues, 3.0% said there were no challenges. Other respondents, however, identified the following (reported in percentages).

Long waits for a therapist	13.9
Affordability	11.6
‘Other’ (including, balancing cost and need, concern that counseling would identify problems best kept hidden, COVID-19 concerns, discomfort/shame/embarrassment)	11.4
Insurance issues	11.0
Lack of knowledge about how to seek help	10.9
Fear/stigma	10.0
Inability to find providers with experience regarding particular needs	8.1
Lack of availability of providers with specialty training needed	6.1
Accessibility	5.2
Cultural differences/language barrier	2.4
Transportation	2.3
Finding time/too busy schedules	2.2
Lack of time	1.5
Concern about finding someone who is a ‘good fit’	0.6

- As with physical health, *females* were more likely than were males to cite challenges to seeking professional help.
- Those *aged* 40-49 identified the greatest number of challenges to seeking professional help for mental health issues (including accessibility, long waits for therapists, cultural differences/language barrier, lack of knowledge of how to seek help, and fear/stigma). Those aged 50-69 cited insurance issues, affordability, transportation, lack of ability of providers with specialty training needed, and inability to find providers with experience regarding their particular needs.
- Those with higher educational achievement identified the most challenges in seeking help. It would generally be expected that those with

more education would experience fewer challenges in seeking help due to greater knowledge of resources. In this group those with greater educational achievement were also those who identified as Middle Eastern, Asian, South Asian and multi-racial/ethnic ( $V=.142$ ;  $p=.000$ ). It was, therefore, the cultural differences among those with higher education that accounted for more challenges.

- Respondents with
  - *household incomes* between \$25,000 and \$74,999 identified
    - transportation and
    - cultural differences/language barrier as the greatest challenges;
  - *household incomes* between \$100,000 and \$149,999 identified
    - lack of knowledge about how to seek help and
    - fear/stigma as the greatest challenges;
  - *household incomes* between \$150,000 and \$199,999 identified
    - insurance issues, lack of therapists with specialty training, and
    - inability to find providers with appropriate experience as the greatest challenges;
  - *household incomes* between \$200,000 and \$299,999 identified
    - insurance issues,
    - affordability,
    - accessibility,
    - long waits for therapists, and
    - cultural differences/language barriers as the greatest challenges.
- With regard to race and ethnicity,
  - Primary challenges cited by *White* respondents were
    - insurance issues,
    - affordability, and

- transportation.
- *Asian* respondents cited the three greatest challenges as
  - cultural differences/language barrier,
  - inability to find providers with appropriate experience, and
  - lack of knowledge about how to seek help.
- Among *South Asian* respondents, the three greatest challenges were
  - cultural differences/language barrier,
  - lack of knowledge about how to seek help, and
  - fear/stigma.
- Among *Black* respondents, the three greatest challenges were
  - transportation,
  - cultural difference/language barrier, and
  - insurance issues.
- Among *Hispanic* respondents, the three greatest challenges were
  - cultural differences/language barrier,
  - lack of knowledge about how to seek help, and
  - inability to find providers with specialty training.
- Among *Middle Eastern* respondents, the three greatest challenges were
  - inability to find providers with specialty training,
  - fear/stigma, and
  - lack of knowledge about how to seek help.
- Among those who identified as *multiracial/ethnic*, the three greatest challenges were
  - accessibility,
  - cultural differences/language barrier, and
  - inability to find providers with appropriate experience.

***Summary of findings regarding overall health:***

Respondents feel their physical health is better, overall, than is their mental health, but mental health has been more stable than has been physical health. There is a strong correlation between physical and mental health, meaning that those who report good physical health also report good mental health (and vice versa) ( $G=.557$ ;  $p=.000$ )

Poor health, physical or mental, is seen as interfering with regular activities, but while poor *physical* health has a greater effect on activities such as social and recreational activities and participation in hobbies, poor *mental* health has a greater effect on activities such as taking care of oneself and daily role obligations.

Sources of help for *physical* health care or advice are, largely, health care professionals (primary care providers and specialists). Sources of help for *mental* health care or advice are more likely to be more private in nature (family, friend)<sup>10</sup>.

A number of challenges were noted relative to both physical and mental health help-seeking. These included long waits for a provider, affordability, and insurance issues. Challenges for those seeking professional help with *physical* issues also included transportation problems, finding time to seek help, and locating a provider able to address particular needs. Challenges for those seeking professional help with *mental* health issues are similar but also include embarrassment, fear/stigma, and lack of knowledge about how to seek help.

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<sup>10</sup> This finding is consistent with the stigma associated with disclosure of mental health issues in the public sphere and with the difficulties experienced in seeking mental health care.

### Section III. Health Behaviors and Health Conditions

To assess the nature and degree of health conditions among Lexington residents, respondents were asked to indicate whether they and/or a family member had been diagnosed with specific conditions.

#### **Have you and/or a family member been diagnosed with... (in percent)**

<b>Condition</b>	<b>Respondent</b>	<b>Family member</b>
Heart disease	8.5	20.7
Neuromuscular disorder	2.3	8.7
Endocrine disorder	9.5	14.7
Cancer	9.6	22.4
Disease of the lungs	7.5	10.4
Sensory issues	6.5	8.3
Digestive issues	9.2	7.4
Fertility issues	6.9	3.4
Psychosomatic disorder	3.1	3.4
ADHD	3.9	12.5
Anxiety	18.5	20.7
Panic disorder	4.2	6.9
Social anxiety	6.5	7.9
Depression	20.5	20.1
OCD	2.1	5.5
Eating disorder	2.4	3.4
Body dysmorphic disorder	1.3	1.7
PTSD	4.7	3.7
Bipolar disorder	1.2	3.8
Schizophrenia	0.7	1.7
Substance use disorder	1.5	4.8
Dementia	0.5	9.3
Developmental disability <sup>11</sup>	0.8	2.9
Learning disability <sup>12</sup>	1.9	5.8
Other <sup>13</sup>	2.8	3.5
Mental health hospitalization	5.8	12.7

<sup>11</sup> Developmental disabilities were identified by respondents to include: chromosomal abnormalities, Asperger's, autism, cerebral palsy, Down's syndrome, developmental delay

<sup>12</sup> Learning disabilities were identified by respondents to include: ADHD, Asperger's, autism, executive functioning and processing challenges, dyslexia, non-verbal learning disorder, reading disorder

<sup>13</sup> Other was identified to include: Alzheimer's, food allergies, fibromyalgia, Landau Kleffner disorder, migraines, myasthenia gravis, Raynaud's syndrome, osteoarthritis, quadriplegia, sarcoidosis, sleep apnea, traumatic brain injury

**Prescription medications** are being used by 67.4% of respondents. Negative side effects from those medications were reported by 15.8%. **Negative side effects** include: bone loss, joint/muscle/nerve pain, cognition/emotional problems, constipation, diarrhea, drooling, fatigue/sleepiness, insomnia, dry mouth/cough, erectile dysfunction/loss of libido/inability to reach orgasm, increased appetite/weight gain, decreased appetite, gastrointestinal problems, headaches, mood changes/swings, memory loss, light sensitivity, blood pressure changes, loss of muscle mass, muscle cramps.

Respondents said their **sleep** is generally 'very good' to 'good' (62.9%). There were no statistically significant differences in evaluations of sleep by sex or racial/ethnic identification. However, younger respondents ( $G=-.096$ ;  $p=.015$ ), those with lower household incomes ( $G=-.111$ ;  $p=.005$ ), and those with lower educational achievement ( $G=-.089$ ;  $p=.031$ ) were more likely to say their sleep was "poor".<sup>14</sup>

There is little **drug/substance use** among respondents. In the past 30 days, 37.3% said they used alcohol; 8.0% said they used marijuana; 1.1% said they used recreational drugs; and 3.3% said they used cigarettes/pipes/e-cigs.

There were statistically significant differences when examining drug/substance use by sociodemographic variables.

- Males ( $V=.140$ ;  $p=.005$ ), younger respondents ( $G=.074$ ;  $p=.047$ ), those with less education ( $G=.113$ ;  $p=.005$ ), those with household incomes of \$200,00 or more ( $G=.137$ ;  $p=.000$ ), and those who identified as Hispanic and Middle Eastern ( $V=.115$ ;  $p=.024$ ) acknowledged using *alcohol* on more days.
- While sex of respondent and household income were not correlated with *marijuana* use, there were differences observed with respect to age,

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<sup>14</sup> According to the Centers for Disease Control, "Adults need 7 or more hours of sleep per night for the best health and wellbeing. Short sleep duration is defined as less than 7 hours of sleep per 24-hour period."



education and race/ethnicity of respondents. Specifically, younger respondents ( $G=-.423$ ;  $p=.000$ ), those with less than a college education ( $G=-.390$ ;  $p=.001$ ), and those who identified as Black, Hispanic and multi-racial/ethnic ( $V=.155$ ;  $p=.000$ ) used marijuana more frequently.

- There were no statistically significant differences in *recreational drug* use by sex, age, education or household income. However, recreational drug use was higher among those who identified as Black, Hispanic and multi-racial/ethnic ( $V=.184$ ;  $p=.000$ ).
- *Cigarette/pipe/e-cig* use was not related to age or household income, but it was related to sex, educational achievement and race/ethnicity. Males were more likely to use tobacco products ( $V=.148$ ;  $p=.004$ ), as were those respondents with less than a college degree ( $G=-.412$ ;  $p=.021$ ), and Black and Middle Eastern respondents and those who identified as multi-racial/ethnic ( $V=.139$ ;  $p=.000$ ).

Further, respondents were asked if they used **prescription medications not prescribed for them or taken not according to a health care provider's instruction** in the last 30 days. In this manner, 6.0% said they used prescription anxiety or sleep medication; 1.9% said they used prescribed stimulant medication; 3.7% said they used prescription pain medication. Other prescribed medications were used by 5.3% of respondents. This included: anti-depressants, blood pressure medications, cholesterol medications, medication for ADHD, Amoxicillin, Lorazepam for sleep, arthritis medications.

There were some differences in these behaviors when examining them relative to sociodemographic variables.

- While differences by sex and age were not statistically significant, it was found that Black, Middle Eastern and multi-racial/ethnic respondents ( $V=.139$ ;  $p=.000$ ), those with household incomes of \$74,999 or less ( $G=-.207$ ;  $p=.055$ ), and that those with less education ( $G=-.326$ ;  $p=.007$ ) were

more likely to report improper use of *prescription anxiety or sleep medications* than were other respondents.

- There were no statistically significant differences by sex, age, household income or education with respect to use of *prescribed stimulant medication*, but there were differences by race/ethnicity. Specifically, Black and Hispanic respondents were more likely to report improper use of these medications than were respondents in other groups ( $V=.128$ ;  $p=.010$ ).
- There were no statistically significant differences with respect to use of *prescription pain medication*.

Few respondents engaged in **self-injurious behaviors** including, intentionally hurting themselves (2.1%), considered taking their own lives (5.6%), or attempting to take their own lives (0.6%).

Respondents were asked a series of questions about **stress** in their lives. The first questions focused on the **amount of stress** they experience with respect to a number of conditions. The choices ranged from 1 to 5, where 1 = no stress and 5 = extreme stress. Mean scores for each of the conditions is presented below:

On a scale from 1 to 5, where 1= no stress and 5 = extreme stress, how much stress do you currently feel with regard to... (mean score)

Current political/social events	2.92
COVID-19*	2.63
Concerns/worries about the future	2.48
Concerns about physical health	2.29
Experiences with social/racial injustice	2.10
Concerns about mental health	2.09
Difficulty getting enough sleep	2.01
Being too busy/having too busy a schedule	1.99
Problems with family members	1.99
Loneliness	1.93
Caregiving issues	1.90
Not having friends/family nearby	1.82
Financial concerns	1.76

Having a job	1.50
Being able to get access to health care	1.40
Having stable housing	1.29
Personal safety	1.27
Substance abuse	1.27
Having transportation options	1.25
Social pressures from friend/peers/etc.	1.25
Having health insurance	1.23
Being able to feed my family	1.19
Language barriers/communication problems	1.16

Given that this questionnaire was administered during the COVID-19 pandemic, further investigation into specific issues that could create stress associated with COVID-19 were explored.

<b><i>*Responses to specific items regarding COVID-19</i></b>	<b><i>Percent of respondents selecting the response</i></b>
Reduced my social interactions	65.7
Restricted my movements	55.1
Fearful of contracting COVID-19	50.3
Fearful of transmitting COVID-19	31.6
Increased my time spent online	46.3
Made me feel isolated	36.9
Made me feel anxious and/or depressed	29.2
Made it difficult to access physical health care	17.1
Made me anxious about vaccine related issues	11.6
Caused me to lose a family member/close friend	9.2
Made it difficult to access mental health care	8.2
Altered my financial situation	6.4
Complicated my health status	5.6
Made me sick (I contracted COVID-19)	2.9
Forced me into a different care setting	1.7
Made it hard to get physical care needed at home	1.2
Other	7.5

Respondents were then asked how they **deal with experienced stress**.

Responses were as follows:

How do you typically deal with stress? (in percent\*)

Talk with a trusted friend/family member	45.9
Engage in physical activity/exercise	44.1
Read	37.3
Watch TV	35.1
Listen to music	31.0
Sleep	27.5
Practice stress management techniques	22.4
Socialize with friends in person	21.3
Ignore it	17.7
Utilize a counselor/therapist	17.0
Socialize with friends online	15.6
Surf social media/the Internet	13.7
Drink alcohol/use drugs	11.7
'Other'	7.8
Utilize a support group	3.2
Talk with a faith leader	2.8

'Other' included: prayer/attendance at religious services, engaging in outdoor activities (e.g., gardening, walking, hiking), playing with a pet, cooking, engaging in a project or hobby (e.g., cleaning an area in the house, painting, knitting), eating, helping others/volunteering.

\*Percentages do not add to 100 due to multiple selections by respondents.

### ***Summary of findings regarding health behaviors and conditions:***

Both physical and mental conditions were identified among respondents. The most common *physical* health conditions for respondents were cancer (9.6%)<sup>15</sup>, endocrine disorders (9.5%)<sup>16</sup> and digestive issues (9.2%)<sup>17</sup>. For family

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<sup>15</sup> According to the National Cancer Institute, "In 2020, an estimated 1,806,590 new cases of cancer will be diagnosed in the United States". The National Center for Health Statistics notes that 9.5% of adults have ever been diagnosed with cancer.

<sup>16</sup> As cited in Golden SH, Robinson KA, Saldanha I, Anton B, Ladenson PW. Prevalence and incidence of endocrine and metabolic disorders in the United States: a comprehensive review. The Journal of Clinical Endocrinology & Metabolism. 2009 Jun 1;94(6):1853-78, endocrine disorders affect at least 5% of the population in the U.S.

<sup>17</sup> According to the National Institute of Diabetes and Digestive and Kidney Diseases, "60 to 70 million people [are] affected by all digestive diseases".

members, the most common physical conditions were cancer (22.4%), heart disease (20.7%)<sup>18</sup> and endocrine disorders (14.7%). The most common *mental* health conditions for respondents were depression (20.5%)<sup>19</sup> and anxiety (18.5%)<sup>20</sup>. For family members, the most common mental health conditions were anxiety (20.7%), depression (20.1%) and ADHD (12.5%)<sup>21</sup>. More than twice as many family members were hospitalized for a mental health condition than were respondents.

While a sizeable percentage of respondents said they take prescription drugs, relatively few experience negative side effects. Side effects that are experienced are wide-ranging and tend to be dependent upon the type of medication being taken.

There is relatively little drug/substance use reported among respondents, with alcohol being the substance used most often of those listed and recreational drugs being the drug used least often. Tobacco use is also rather low. There were, however, notable differences in the use of various drugs by age, education and race/ethnicity. There was very little use of medications not prescribed for the respondent or use of medications not in accordance with a health care provider's instruction.

Sleep was generally seen as good, and very few respondents had engaged in self-injurious behaviors.

When asked about stress in their lives, respondents said that the greatest sources of stress are current social or political events, concern about the

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<sup>18</sup> The Centers for Disease Control states that "Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States", and that 4.6% of adults have ever been diagnosed with coronary heart disease.

<sup>19</sup> According to The National Center for Health Statistics, 4.7% percent of adults aged 18 and over are diagnosed with regular feelings of depression.

<sup>20</sup> The National Institute of Mental Health says "an estimated 19.1% of U.S. adults had any anxiety disorder in the past year" and that "an estimated 31.1% of U.S. adults experience any anxiety disorder at some time in their lives".

<sup>21</sup> According to the National Institute of Mental Health, "The prevalence of children ever diagnosed with ADHD increased by 42% between 2003 (7.8%) and 2011 (11.0%)".

future, and effects of COVID-19 on various aspects of their lives. Factors that cause the least stress include having health insurance (not surprising given that almost 100% of respondents said they have health insurance), being able to feed their family, and cultural differences/language barriers.

Finally, respondents were asked how they deal with stress. Responses ranged from talking with others (e.g., friends, family members, counselors/therapists) to exercise/physical activity to employing stress management techniques to engaging in personal/individualized activities (e.g., reading, listening to music). Some (17.7%) said they ‘ignore it’.

## Findings of Note

- The average age of respondents was 58.6 years. This suggests that the survey may not have been able to adequately measure physical and mental health issues faced by younger adults.
- There were fewer Asian/South Asian (5.2% of all participants) respondents than would be expected based on their proportion in the population. Given the stigma associated with mental health and the cultural resistance to seeking help for mental health issues among Asian populations generally, this is important. It is commonly accepted, and as several sources<sup>22</sup> note, cultural factors influence conceptions of and attitudes toward mental health among Asians, particularly immigrants. Traditional values place emphasis on the family, not outside sources, for support. Social stigma and the need to save face prevent Asians from seeking mental health care, and Asian patients are more likely to present with physical complaints than to admit to mental health complaints. The low rate of response from Asian and South Asian residents means mental health concerns/problems, in particular, may not have been adequately assessed in this study.
- While cultural differences/language barriers were not specifically identified as causes for stress, this was identified as a challenge for help-seeking (albeit not a dominant factor). Cultural differences/language

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<sup>22</sup> For example, see: Kramer, E., K. Kwong, E. Lee, and H. Chung. 2002. "Cultural factors influencing the mental health of Asian Americans". *Western Journal of Medicine* 176(4): 227-231.; Ng, C. 1997. "The stigma of mental illness in Asian cultures". *Australian and New Zealand Journal of Psychology* 31: 382-390; Augberger, A, A. Yeung, M. Dougher, and H. Hahm. 2015. "Factors influencing the underutilization of mental health services among Asian American women with a history of depression and suicide". *BMC Health Services Research* 15: 542; Han, M., H. Pong. 2015. "Mental health help-seeking behaviors among Asian American community college students: the effect of stigma, cultural barriers, and acculturation". *Journal of College Student Development* 56(1): 1-14; McLean Hospital 2021 <https://www.mcleanhospital.org/essential/why-asian-americans-dont-seek-help-mental-illness>

barriers were, however, noted as one of the primary challenges faced by members of several racial/ethnic groups, and is, therefore, worthy of further examination.

- There were more responses from more highly educated members of the population than there were from those with less education. As this could affect help-seeking, this is relevant<sup>23</sup>. Less educated people tend to have fewer resources, or be aware of available resources.
- More highly educated respondents said they face more challenges in seeking help for physical and mental health conditions. This could be an artifact of the fact that more highly educated respondents tended to be members of minority groups and that it was members of minority groups (specifically, Asians, South Asians, Blacks, Hispanics, and those who identified as multi-racial/ethnic) who said cultural differences/language barriers made help-seeking for physical health conditions a challenge ( $V=.255$ ;  $p=.000$ ) and help-seeking for mental health conditions a challenge ( $V=.295$ ;  $p=.000$ ). Black respondents were most likely to identify cultural differences as a challenge when seeking help for physical health conditions and Blacks and Hispanics were more likely to identify cultural differences/language barriers as a challenge when seeking help for mental health conditions.
- Since 99.5% of the respondents have some form of health insurance, assistance regarding insurance should be aimed at navigating the system rather than at procuring coverage. This is clearly an area in which many respondents could use help (6.6% of respondents identified insurance issues as a challenge when seeking help for physical health conditions

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<sup>23</sup> See, for example, Magaard, J., T. Seeraian, H. Schulz, and A. Brutt. 2017. "Factors associated with help-seeking behavior among individuals with major depression: a systematic review". *Plos One* 12(5):1-17; Unal, S., B. Kaya, H. Yalvac. 2007. "Patients' explanation models for their illness and help-seeking behavior". *Turkish Journal of Psychology* 18(1): 38-47.



and 11.0% identified these issues as a challenge when seeking help for mental health conditions).

- Physical health status and mental health status were highly correlated in this study, suggesting that any programs/services that are developed should take both types of health into account. Previous research has confirmed that poor mental health and poor physical health are linked and that poor mental health can lead to harmful behaviors (e.g., smoking, alcohol use, risky behaviors, gambling)<sup>24</sup>.
- The primary effects of poor physical health were on social and recreational activities while the primary effects of poor mental health were on taking care of oneself and performing daily role obligations.
- While help-seeking patterns for physical and mental health conditions have much in common, there are important differences to note with respect to the order of the support sought. Specifically, when seeking help for physical health issues, respondents were more likely to turn to their primary health provider, specialist, or family member. When seeking help for mental health issues, respondents were more likely to turn to their therapist, a friend, or family member.
- Challenges to help-seeking for physical and mental health care were, largely, similar, however, challenges to mental health help-seeking also included fear/stigma and lack of knowledge about how to seek help.
- Transportation was mentioned as a challenge to both physical and mental help-seeking for respondents.
- Rates of illness (for the respondent and family members) cited in the study argue that there is a greater prevalence of some conditions among the respondents than might be expected in the general population.

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<sup>24</sup> Ohrnberger J. Fichera E. Sutton M. 2017. "The relationship between physical and mental health: A mediation analysis". *Social Science & Medicine* 195:42-49.

Specifically, higher rates of cancer and heart disease were cited among family members; endocrine disorders among respondents; depression among both respondents and family members; and anxiety among family members.

- Substance abuse, sleep, and self-injurious behaviors, as reported, do not appear to be significant problems among respondents.
- Stress is, however, an issue in the lives of many (or most) of the respondents. The greatest sources of stress were found to be current social and political events, concerns about the future, and effects of COVID-19.
- Ways of coping with stress reported include: talking with others, exercising or engaging in physical activity, employing stress management techniques, and participating in individualized activities of personal interest. Some respondents said they just ‘ignore it’.

## **Recommendations for Next Steps**

- Given that the average age of respondents was 58.6 years, efforts should be made to gather more information about younger and middle aged adults.
- Since there were proportionately fewer Asian and South Asian respondents than corresponding members of the population in Lexington, as a consequence, health issues, especially mental health issues, might not have been adequately assessed in the study. Efforts should therefore be made to gather more information about members of these groups.
- A substantial number of respondents identified cultural differences/language barriers as impediments to help-seeking. More information should be gathered about specific aspects of cultural differences/language barriers that affect help-seeking in order to appropriately address the need for improved communication and communication skills.
- While most respondents said they have at least a college education, there were a notable number of respondents with less education. Since there is a correlation between more education and more resources available to address problems, more outreach efforts should be made to those with less education. One way to do this would be to increase publicity about programs and services available through the Town.
- To address the issues identified in the preceding two bullets,
  - there should be greater availability of translators or translation services and

- educational programs should be offered that focus on how to seek help, interpret medical information, and engage in follow-up care and adherence to medical recommendations.
- Most respondents said they have health insurance. However, many said they had trouble working with insurance companies or navigating the system. Assistance, through one-on-one counseling and/or through educational programs, should be provided to help residents understand their insurance plans or programs or coverage.
- Given that respondents identified difficulty accessing appropriate providers and long waits for providers as challenges to both mental and physical help-seeking, assistance with identifying providers and with navigating a wait list for a provider should be provided.
- Since physical and mental health are related and affect one another, any programs developed should acknowledge the association and address the two types of health.
- Target programs for physical health that address social and recreational needs. Target programs for mental health that address self-care and managing daily routines. Develop programs that address cessation and prevention of harmful behaviors.
- Since it is already known that stigma is a significant impediment to mental health help-seeking, and the findings in this study confirm that, develop a stigma reducing educational curriculum and programs to combat stigma and help people deal with stigma.
- Transportation was cited by respondents as presenting a challenge when seeking help for health care. Lexington already has several options available (e.g., Lexpress, RIDE, MBTA, FISH). Greater public awareness of these services is needed.

- Stress was noted to be a factor in the lives of many respondents. Many of the sources of stress were cited as residing in social and political issues. Provide stress-reduction programs and opportunities for residents to formally and informally meet and discuss their concerns.
- Stress could also be addressed through other means. Provide and publicize information about stress-reduction techniques. These could include exercise and physical activity opportunities (e.g., at the Lexington Community Center, bike/walking trails).
- Review the findings with an eye toward what can practically be addressed by the various departments in Town (including the Department of Human Services) and the Mental Health Task Force.
- Confer with the Department of Health to identify areas of overlap in information and ability to provide services/programs.
- Collaborate with other Town departments (e.g., Recreation, Education, Human Services, etc.) to publicize programs/services related to physical and mental health.
- Promote the Mental Health Task Force website on the Town website. The MHTF website contains a large amount of good and helpful information.
- Create greater awareness of the connection between physical and mental health.

## **Recommendations for Target Outcome Assessment**

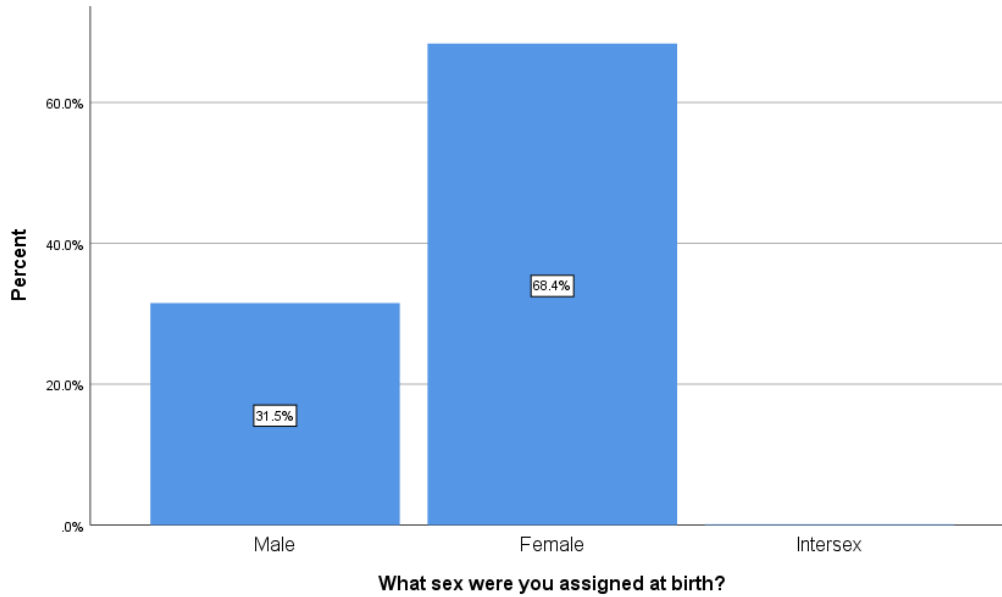
- Repeat this study once programs and services (such as those identified in the section, Recommendations for Next Steps) have been implemented and given some time to produce effects.
- When repeating the study, specifically measure:
  - Respondents' subjective (self) assessments of physical and mental health;
  - Respondents' subjective (self) assessments of whether physical and mental health have improved/deteriorated;
  - Respondents' evaluation of the ease with which they were able to access services or providers of care;
  - Respondents' evaluation of the helpfulness and quality of programs/services offered;
  - Respondents' evaluation of what works, doesn't work, and could be improved;
  - Respondents' suggestions for improvement of programs and services.

# Appendix I

## Responses from Lexington Sample

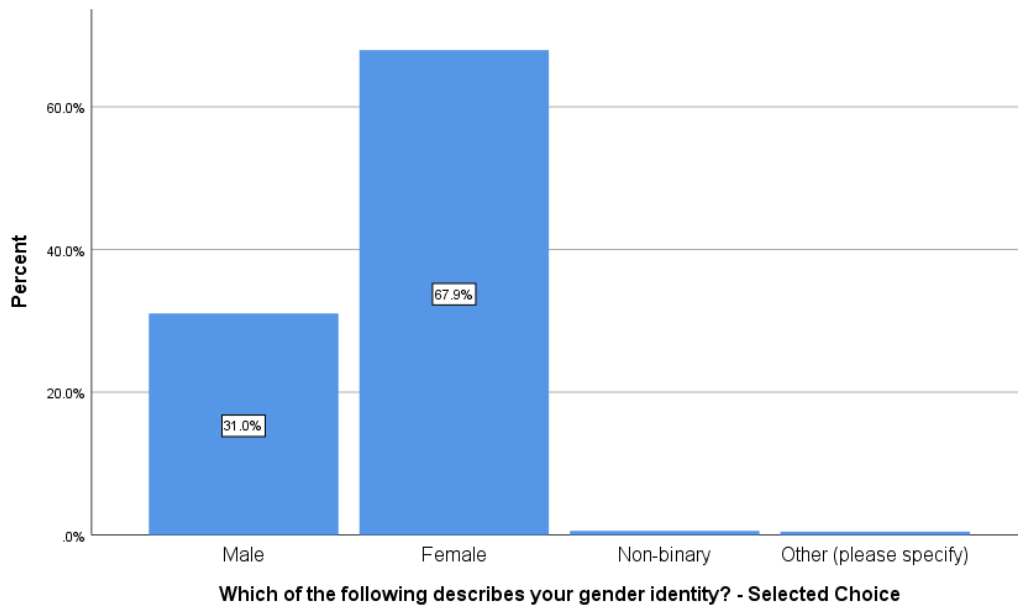
### Key Demographic Variables

#### Sex



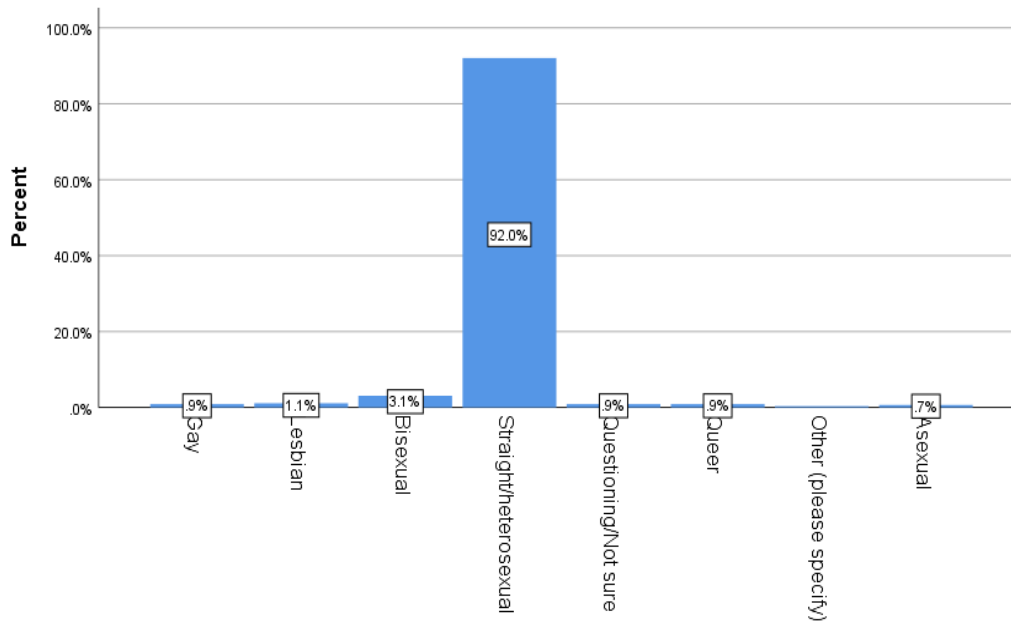
\*Intersex = 0.1%

#### Gender Identity



\*Non-binary = 0.6%; Other = 0.5%

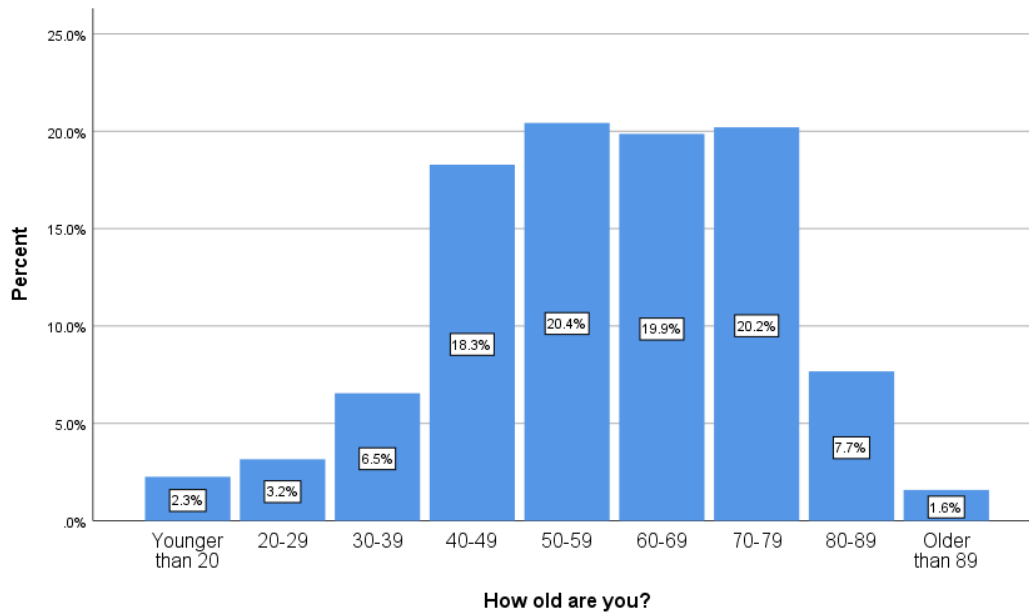
## Sexual Orientation



Which of the following describes your sexuality or sexual orientation? - Selected Choice

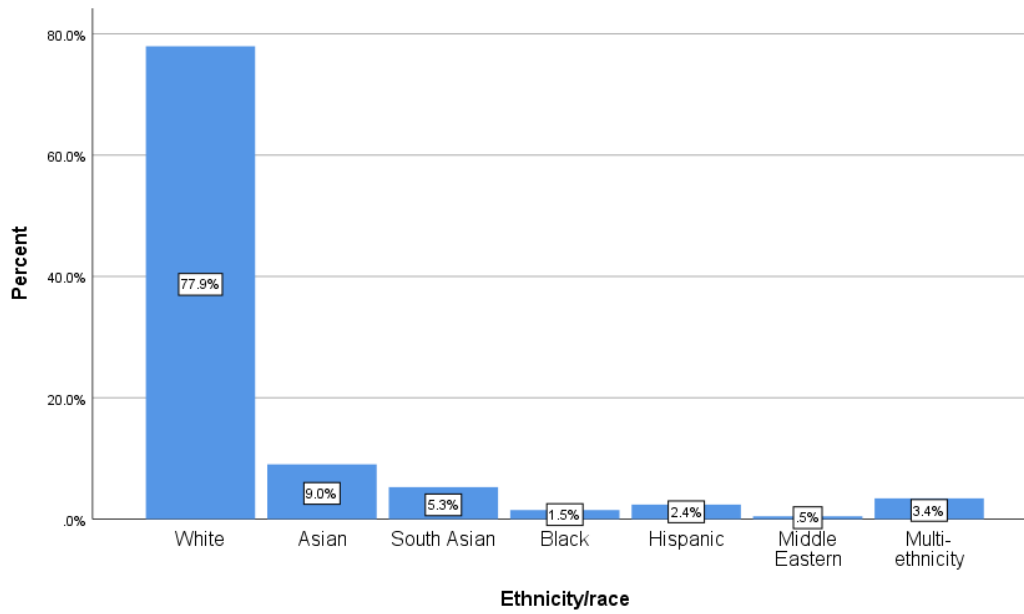
\*Other = 0.3%

## Age

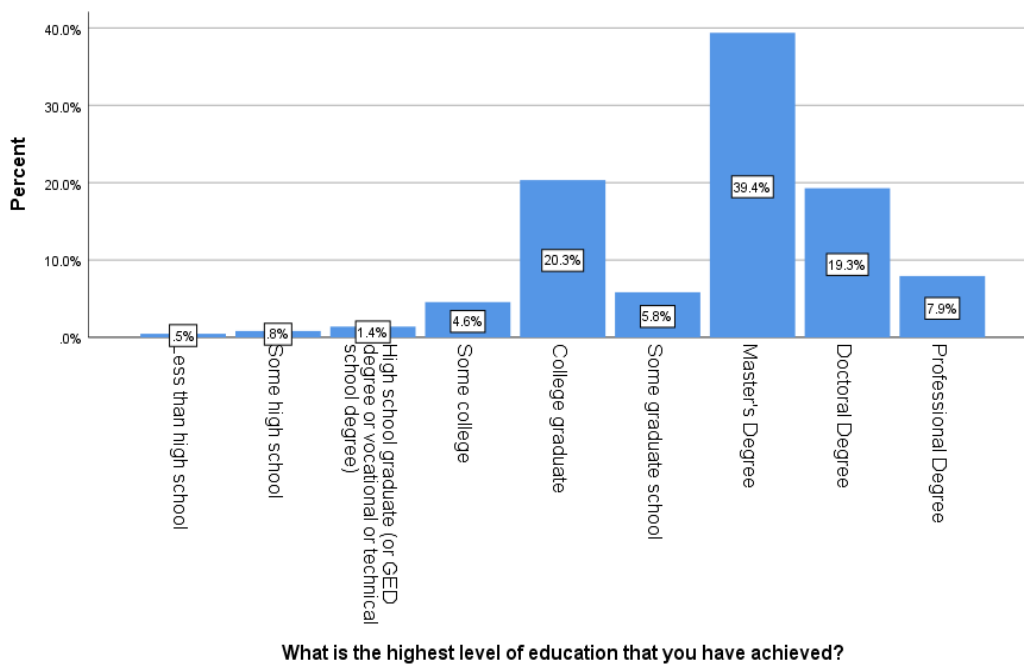




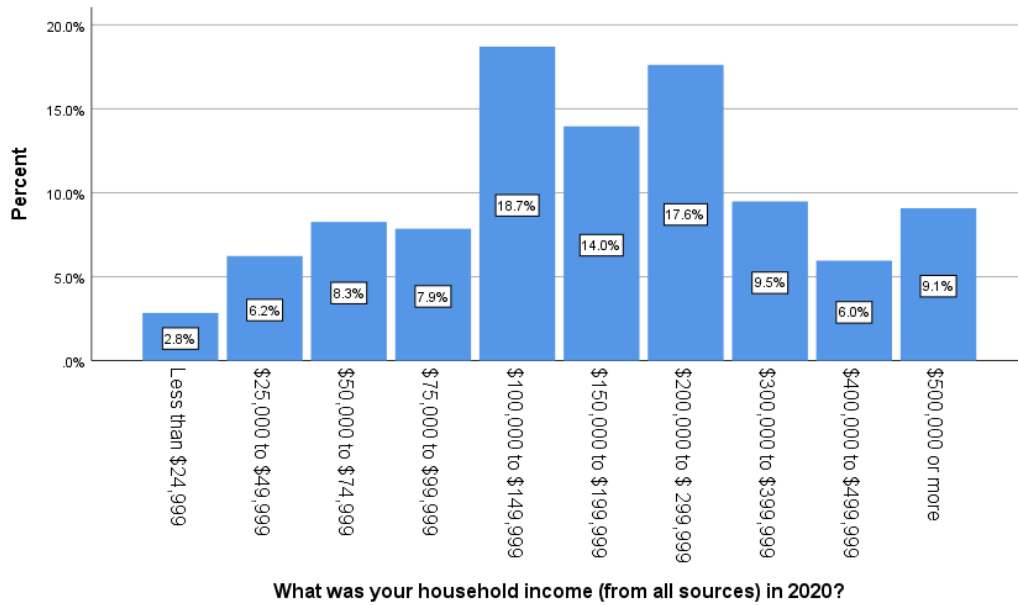
## Race/Ethnicity



## Education



## Income

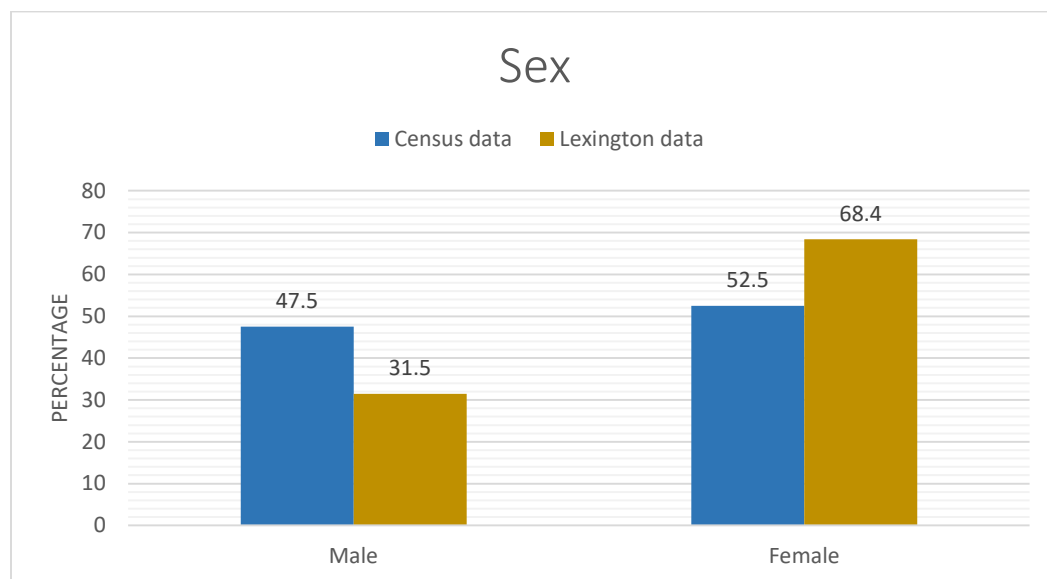


## Appendix II

### Comparison of Sample Responses and Lexington Population Data<sup>25</sup>

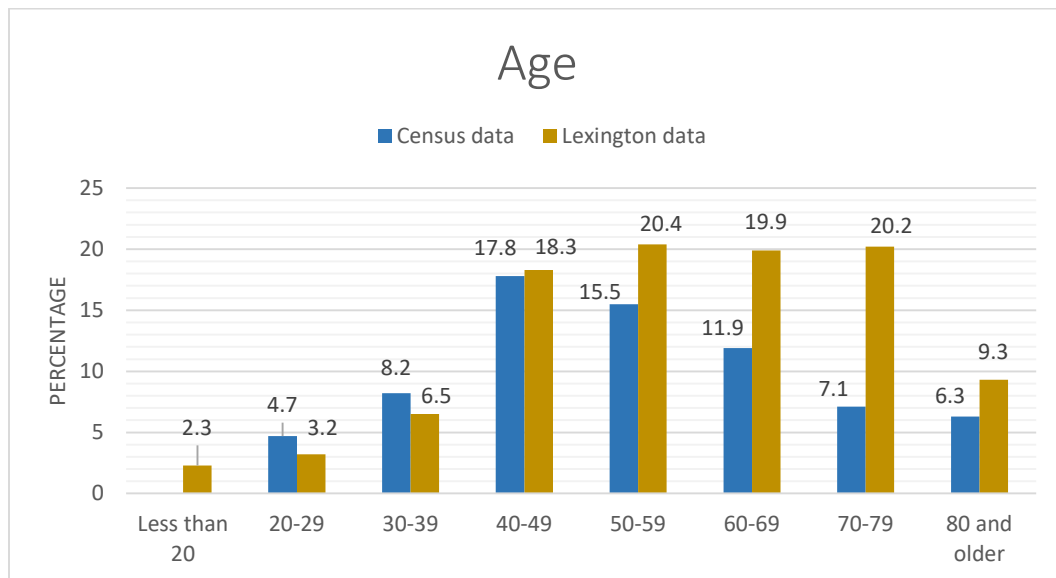
#### Key Demographic Variables

##### Sex

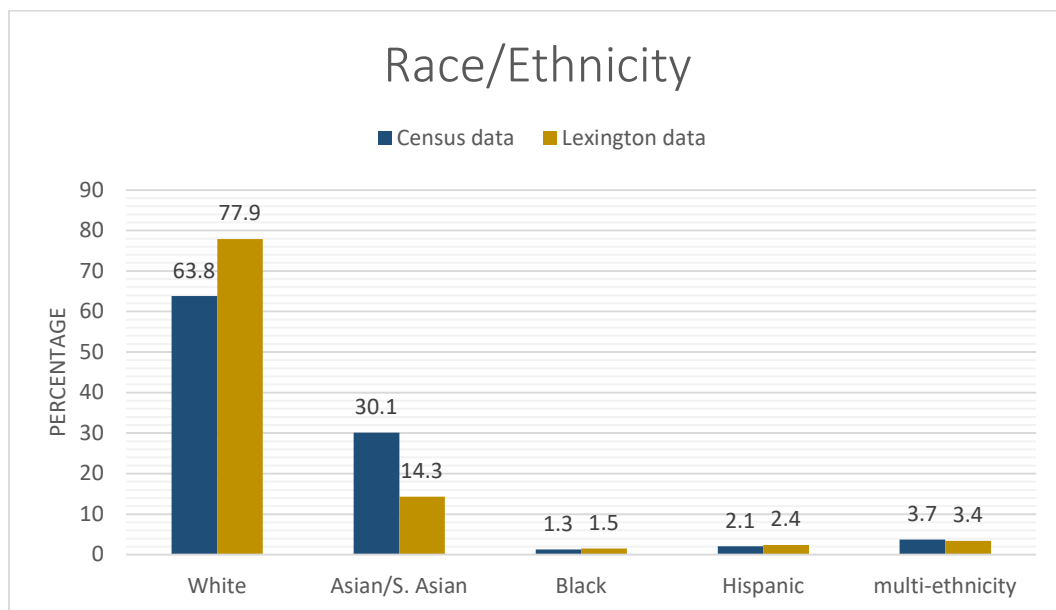


<sup>25</sup> Source: American Community Survey 2019

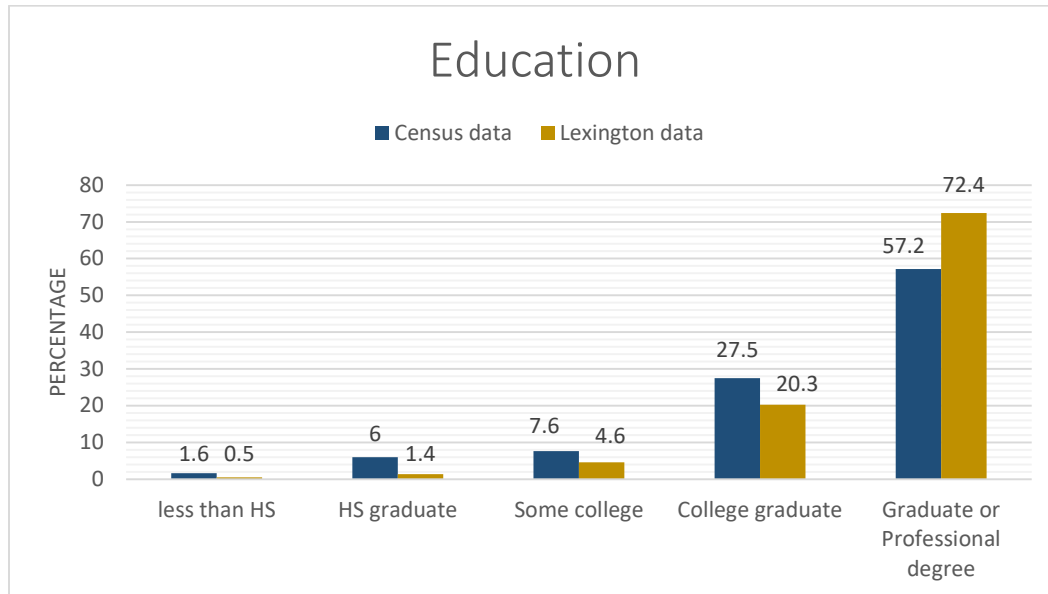
## Age



## Race/Ethnicity



## Education



## Household Income

