Predicting Oral Health Inequalities: The Possible Effects of Sense of Coherence and Social Capital

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ABSTRACT
This study is an effort to understand why oral health inequalities exist at high rates regardless of the policies and intervention that have been put into place to reduce oral health inequalities. This study explores the public health theoretical approaches of sense of coherence and social capital in order to understand the relationship between social environment and oral health. Researchers predicted a positive correlation between social capital, sense of coherence, oral health and perceived need. Additionally, study tested for a correlation between income, social capital and sense of coherence. Thirty University of Wisconsin-Superior students were given a four part modified survey, which included sense of coherence, oral health and quality of life, perceived need and social capital. A correlation between sense of coherence and oral health was not statistically significant, however the relationship was in the predicted direction- as one’s sense of cohere increases, so does one’s oral health. Data supported a correlation between sense of coherence, happiness, and overall health. Data also supported a correlation between social capital and oral health. However, sense of coherence and social capital did not act as a predictor of perceived dental treatment. Data did support a correlation between perceived need and oral health. Income acted as a predictor of sense of coherence, but not a predictor of social capital. The research reveals there is a continuing need to reveal oral health inequalities in populations and a continuing need to adopt a more holistic approach to oral health promotion, education, public health policy.

Introduction
The release of the first-ever Surgeon General Report on Oral Health in 2000 exposed significant oral, dental and craniofacial health inequalities existing in the United States. The report supported evidence of oral diseases, including but not limited to, oral and pharyngeal cancers, dental carries, and periodontal disease affecting venerable populations such as “poor children, the elderly, and many members of racial and ethnic minority groups” (Oral Health Report, 2000). The report increased awareness to dental health educators, scientists, practitioners, policy makers and activists alike. In order to improve the oral health status on local, state, and national levels programs and policies were implemented, such as fluoride programs and low-income insurance programs such as Medicaid and State Children’s Health Initiative Programs (SCHIP). Additionally, the objectives of the Healthy People 2010 was launched and the National Institute of Dental and Craniofacial Research (NIDCR) has funding millions of dollars to identify oral health disparities. University of California San Francisco, professor Jane Weintraub, clarifies understanding the causes of oral health inequalities can influence and create efficient and successful public health policies.

The effects of the report led to a growth in research which measured the theory base behind oral health policy and educational interventions. The limitations of intervention and health policies were brought to the forefront. Watt (2000) emphasizes the lack of theory behind the interventions previous interventions framed using the health education model, health belief model and psychological theory such as Theory of Planned Behavior and Theory of Reasoned Action commonly focused on an individual’s cognitive processes as determinants of behavior and prevention through defining disease, targeted at changing the lifestyles and behaviors of high risk individuals (Straub, 2002). This type of model and theory based interventions allotted room to exclude social, environmental and political determinates of health. The consequences of the shortage of theory based interventions, as Bunton (1991) found, is that simply “failure to include social, economic, environmental and political factors in any analysis of health behaviors ultimately results in a very negative and victim blaming understanding which can lead to the development of potentially harmful and largely ineffective health policies.”
Researchers have found that oral health inequalities still exist at high rates. What are the determinants of health? What roles do sense of coherence and social capital play in the oral health field and in extending public policy? This study examines what correlations exist between sense of coherence, oral health and quality of life, perceived need and social capital. As Finlayson (2004) asserted, in order to make effective change we must first understand the relationship between oral health, social environments and how they affect health and quality of life; this type of researching is lagging. Moreover, this study will determine the correlation between the social and environmental determinants of oral health, in addition to the relevance of sense of coherence and social capital in predicting oral health inequalities and determining their importance in oral health education, interventions, and policy creation. The research data will bare the impact of social and environmental determinates of health and equally the basis for health inequalities. Essentially, this study is an effort to explore the theoretical approaches, from a public health domain, of social capital and sense of coherence in order to understand the relationship between social environments and oral health.

**Sense of Coherence**
Watt (2002) asserts that the central hypothesis of the sense of coherence, a salutogenic model, is that “stressors are a standard feature of human existence and those individuals and communities with a stronger sense of coherence are better equipped to deal with them and therefore maintain good health and well being.” For example, if two individuals, Mary and Beth, were exposed to the same stressful situation, each individual’s health would decline at various speeds depending on their level of sense of coherence. If Mary had a high level of sense of coherence, she would be able to possess the ability to cope. Mary is able to make sense of the life stressor, manager her emotions and resources that can assist her, and she comprehends the life stressor as understandable or meaningful not as chaotic, random or unpredictable. Mary’s ability to cope with life stressors is reflected in her overall health which would remain superior. Whereas, if Beth’s sense of coherence level is low, her health would decline due to her inability to find meaning, manage and comprehend the life stressor.

A Brazilian study conducted by Freire (2001) hypothesized a positive correlation between sense of coherence and oral health and oral related behaviors. Researchers used questionnaires in the cross-sectional study, collecting data from 664 individuals. Variables were divided into two classifications. The first, oral health status, included information on dental caries, oral cleanliness, and periodontal disease. Second, frequency of sugar intake, tooth brushing frequency, and pattern of dental attendance, all were grouped as ‘health-related behaviors’. The data revealed a positive correlation between sense of coherence and dental carries but no significant relationship existed when testing for other variable in the oral health status group. Furthermore, those who were found to have a high level of sense of coherence were less likely to seek dental treatment when in need, unlike those with low levels of sense of coherence, who were found to seek out dental check ups when in need.

**Social Capital**
According to Watt (2001), a great deal of debate has arisen over the relevance of social capital within the international public health field. The concept of social capital, as defined by Dr. Robert Putnam, is that “networks and the associated norms of reciprocity have value” (Putnam, 2001). In other words, social capital can be thought of as social connectedness. Putnam and fellow colleagues have found that in the past years, social capital has declined and with the decline has come a decline in organizational involvement, club meeting attendance, social trust, philanthropic generosity, and educational performance. A key finding of social capital, as Putnam asserts, areas which were found to be high social capital areas also had individuals reporting better health than area with low social capital. One criticism, as Watt (2000) explains, is that the exact meaning of social capital has not yet been clearly defined, nor has extensive research been done in regards to oral health and social capital.

Other research has tested social capital’s role in the overall health of individuals, such as in the work of Folland. Folland (year) hypothesized that populations which recorded higher levels of social capital would also record ‘improvements’ in individuals’ health. Folland was seeking to discover the
strengths and weakness of the relationship of social capital and health. Measured variables included mortality rates, time and place of oral health disparities, and economics. Ultimately, Folland’s hypothesis was supported in part; a main finding was that social capital and health performs only weakly when each variable is tested separately, but overall, social capital is remarkably strong to the variables tested.

Slade (1996) tested the relevance of “social impact” on oral health. Social impact included pain, embarrassment, social isolation, psychological discomfort, dysfunction, and disability due to oral health and dental care. This study hypothesized that they would find a positive correlation between social impact and oral health. They found that social impact, including cultural factors, influenced oral health. Additionally, noting a significant gap between oral health status and social impact between blacks and whites residents in North Carolina. Black North Carolina citizens, compared to white North Carolina citizen, reported higher levels of poor dental health and social impact including tooth loss, untreated decay, and retained roots.

The Current Study
In order to understand the relationship and relevance between sense of coherence, social capital and oral health, several variables were measured. Data was collected through self-report survey. Sense of coherence was found in past research to assist high leveled individual’s to maintain overall health and well being. This study tests the relationship between sense of coherence to determine if a high level of sense of coherence would assist individual to maintain good oral health. Social capital was also found to influence overall health, therefore, this study looks to determine how social capital influences oral health. Perceived dental care need allowed the researcher to examine if an individual perception of dental care need affected social capital and sense of coherence. Past research found that most populations who were at risk of dental needs were often in the lower income bracket. The main predictions for the study are:

Hypothesis 1: Data will show a positive correlation between sense of coherence and oral health. Thus, as individuals report a higher level of sense of coherence, they will also report better oral health.

Hypothesis 2: Data will show positive correlation between social capital and oral health. Thus, as individuals report a higher level of social capital, they will also report better oral health.

Hypothesis 3: Data will show a negative correlation between sense of coherence and individual dental perceived need. Thus, sense of coherence will act as a predictor of ones perceived need.

Hypothesis 4: Data will show a negative correlation between social capital and individual’s dental perceived need. Thus, sense of coherence will act as a predictor of ones perceived need.

Hypothesis 5: Data will show a positive correlation between income levels and sense of coherence and social capital. Thus, income will act as a predictor for sense of coherence and social capital.

Method
Participants
Thirty undergraduate students (43.3% male, 53.3% female) volunteered to take part in the initial study at the University of Wisconsin-Superior. To participate, all individuals were required to be 18 year or older. Participants were on average 31.2 years old, with the youngest participant recording an age of 19 and the oldest an age of 58. Most participants were Seniors (56.7% Seniors, 20% post graduates or graduate students, 10% Juniors, 6.7% Freshman). Seventy percent of participants were Caucasians (6.7% Mexican, 16.7% other). Sixty-nine percent of the participants recorded the lowest income of less than $20,000, while 10.3% recorded the highest income of between $75,000 and $100,000 per year (6.7% earned between $20,000 - $30,000, 10% earned between $30,000 - $50,000, 3.3% earned between $50,000 - $75,000).
Materials

Participants were given a four part modified questionnaire, which included: sense of coherence, oral health and quality of life, perceived need, and social capital (see Appendix A for all surveys).

Sense of Coherence. Sense of coherence was assessed using a 12-item modified version of the sense of coherence level subscale (Savolainen, 2005); participants were asked to circle the number that best describes their opinion or how they felt about daily life stress, goals, and other individuals. Sample questions include “Until now, the goals for your life have been (1 = Not at all clear, 4 = Somewhat clear, 7 = Quite clear, and 10 = Very clear)’ and ‘Do you have the feeling that you are being treated unfairly? (1 = Never, 4 = Sometimes, 7 = Often, and 10 = All the time).” Appropriate items were reverse-scored and items were averaged to create a single sense of coherence score for each participant ($\alpha = .65$).

Oral Health and Quality of Life. Oral health and quality of life was assessed using a 14 item scale. To reveal the need to adopt a more holistic approach to oral health promotion activities, modified version the oral health and qualify of life level subscale of the (Savolainen, 2005). Participants were asked follow a 1 - 10 response scale (1 = Never, 4 = Sometimes, 7 = Often, and 10 = All the time) to record how often in the past month they have experienced the situation, if participants were unsure they were given instruction to write “don’t know” (DK). Sample questions included: “In the past month, how often have you had painful aching in your mouth?” and “In the past month, how often have you found it uncomfortable to eat foods because of problems with your teeth, mouth, or dentures?” Items were averaged to create an overall oral health score for each participant ($\alpha = .85$).

Perceived Need. Perceived need was assessed using an 11- item modified version of the perceived need level subscale. Individuals identified their dental health status by recording an answer of yes or no to questions about whether they needed dental treatment (e.g. “Do you feel that you are in need of dental treatment”). Individuals were also asked to assess their needs of treatment (e.g. “how soon do you feel you need treatment”) and to record, if at all in the past 12 months reasons why they were unable to seek treatment (e.g. “didn’t have time, would cost too much, couldn’t get an appointment, would have to travel too far, didn’t have a way to get there, didn’t have anyone to care for children or their family members, didn’t have insurance, other”).

Social Capital. Social capital was assessed using a 26- item modified version of Social Capital Community Benchmark Survey (2002). Instructions were divided into three sub-sections. First, participants were given the following instructions:

We are conducting an important survey about life in communities across America including yours. We’d like to ask you some question about how you view other people, groups and institutions. For each of the following item please use the following scale to record an answer in the blank provided to the left of each item.

Sample items included “How much do you trust the people in your neighborhood?” and “How much do you trust African Americans?” Response options were “1 = Do not trust them at all, 4 = Trust them a little, 7 = Trust them somewhat, and 10 = Trust them a lot.” Second, participants read the following instructions “For the next questions please place an ‘X’ or checkmark next to the statement that best represents your answer.” Sample items include “How interested are you in politics and national affairs? (Very interested, somewhat interested, only slightly interested, and not at all interested)” and “How much of the time do you think you can trust the national government to do what is right?” (Just about always, Most of the time, Some of the time, Hardly ever). Finally, participants read:
Now I’m going to ask you how many times you’ve done certain things in the past 12 months, if at all. For all of these I want you just to give me your best guess, and don’t worry that you might be off a little. About how many time in the past months have you:

Sample items include “Working on a community project”, “Donated blood” and “Been in the home of a friend of a different race or had them in your home.” Response options were Never, Once in the past year, 2-4 times in the past year, 5-9 times in the past year, About once a month on average, Twice a month, About once a week on average, and More than once a week. Items were reverse-scored where appropriate and summed to create a social capital sum score for each participant ($\alpha = .84$).

**Procedure**
Participants were informed of the research project via verbal class announcements. Those who wished to participate were given a consent form, a four-part modified survey which included: sense of coherence, oral health and quality of life, perceived need, and social capital surveys, and a self addressed return posted paid envelope. Participants had the option to return the surveys by mailing the surveys in the return envelope or by bring the survey to a designated return box located on campus. Additionally, all signed consent forms were entered into a lottery drawing; one individual received a $50 Visa gift card for completion of the survey.

**Results**
Hypothesis One was not supported, however the data showed that sense of coherence increases in the same direction as oral health and quality of life, though the correlation was not statistically significant. Thus, while not statistically significant, as sense of coherence increases, participants generally report better oral health and higher quality of life. Furthermore, data supports a correlation between sense of coherence and happiness ($r = -.52, p = .004$), such that as sense of coherence increases, participants’ happiness also increases. Additionally, data supports a significant correlation between sense of coherence and overall state of health ($r = -.62, p < .001$), such that as sense of coherence increases, participants’ overall health also improves. There is also a significant correlation between oral health and overall health ($r = -.69, p < .001$).

**Hypothesis 2**
Hypothesis Two was supported. The data demonstrate a significant correlation between social capital and oral health ($r = -.55, p = .002$), such that as social capital increases, the quality of oral health also increased.

**Hypothesis 3 and 4**
Hypothesis’s three and four were not supported. Data provided no evidence of sense of coherence or social capital acting as a predictor of an individual’s perceived need of dental treatment. However, data did support a correlation between individual perceived need of dental treatment and oral health ($r = -.39, p = .036$), such that as one’s perceived need for dental health treatment increases, quality of oral health decreases.

**Hypothesis 5**
Data supported evidence of a correlation between income and sense of coherence ($r = .41, p = .027$), however income did not act as a predictor of social capital.

**Discussion**
For the reason that past research failed to include social environmental factors such as sense of coherence and social capital, both have been tested for correlations in relationship to oral health, perceived oral health needs, and income. Sense of coherence in this study may not have been statistically significant.
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however due to the rate of which sense of coherence increased and the rate which oral health increased it can be asserted that sense of coherence could influence oral health. The existing correlation between social capital and oral health allows the researchers to assume that creating high level social capital communities will result with individuals having less oral health problems. Additionally, past research has found that income plays a major role in oral health inequalities; creating barriers for poor economic groups to access insurance and dental treatment. This study supported past research finding; income was a relevant reason why individuals who were in need of treatment could not access treatment. However income was not related to social capital, the possible effects of increasing social capital levels in various communities may dilute the power of income status as a barrier of dental treatment.

Unfortunately, in the current study, an individual’s level of sense of coherence did not demonstrate a statistically significant positive correlation with oral health. Nevertheless, the correlation supported that as sense of coherence increased, oral health also increased overall. It was found that individuals with higher levels of sense of coherence also had higher levels of happiness. To a great extent, as past research predicts, sense of coherence was found to be positively correlated with overall state of health; high levels of sense of coherence individuals felt that their health was excellent to very excellent. Participants reported evidence of social capital acting as a predictor of oral health. This provides clear initial support for the second hypothesis.

Neither sense of coherence nor social capital acted as a predictor of an individual’s perceived current need of dental care. Data supported a correlation between individual perceived need of dental treatment and oral health. As the dental suggests, access to care due to lack of income remains a cause of oral health needs such as the need for fillings and extracted teeth. Data found that 33.3% of participants perceived themselves to be in current of need of dental treatment. Of those that needed treatment 69.2% felt that they needed treatment within six months, while 15.4% needed treatment immediately and 15.4% needed treatment more than six months from now. During the past 12 months those who have had a dental problem which they would have liked to see a dentist but did not, cited the number one reason (57.1%) as cost. This was followed by having to travel too far (28.6%) or being unable to get an appointment (14.3%). Over half (53.3%) felt as though they needed teeth to be cleaned now by a dentist and almost three-quarters (73.3%) thought they ought to go to a dentist now or very soon. Seventy six percent did not have an appointment to see a dentist. The type of care needed included needes for teeth which need to be filled or extracted. This study demonstrated that income acts a predictor. In particular, sense of coherence was found to be positively correlated with income. One qualification to note is that income was not correlated to social capital, this mean that social capital is potentially accessible to those of different all economic statuses.

Limitations

Although this research has produced valuable information however, limitations for this study must be noted. The sample size was limited to just 30 individuals- had the sample population been greater, the relationship between sense of coherence and oral health, along with, the correlation between sense of coherence, social capital and perceived dental treatment needs might have been significant. There was also a general lack of diversity of race in the sample- the sample population failed to include Black, Native American, Asian American populations. Additionally, the population was over-sampled with regards to income for those in a low economic position- those who earned less than $20,000 per year. Furthermore, sample population included only those who had at least one year of higher education, thus there was an over sampling of those who senior or graduate student, not allowing for the opportunity to examine the trends in levels of education as they relate to oral health, social capital, and sense of coherence. Cross-sectional study limits how sense of coherence and social capital can affect oral health over a period time.

Future Research

In order to see further gains in oral health future research must continue to grow and to challenge health promotion, disease prevention approaches and policy development. Future research should be extended
to longitudinal effects of sense of coherence, social capital, and oral health. Focus of oral health disparities should include an individual’s lack of access to care and the shortcomings of state and federally funded programs such as Medicaid, SCHIPS and disparities among rural areas. Possible effects of the lack of diversity in the oral health professions should be addressed. Along with the effects of hospitals and some groups of society not recognizing the importance of maintaining and understanding oral health and well being. The diversity of age, including that of the very young and very old should be considered for future research of sense of coherence and social capital in regards to oral health. Although, many unanswered questions are in attendance for scientists, practitioners, educators, policymakers, and public research should continue to challenge and find solutions to oral health inequalities. The authors of the *Oral Health in America: A Report of the Surgeon General* (2000, Preface) have stated it best, “along with the quest for answers comes the challenge of applying what is already known in a society where there are social, political, economic, behavioral, and environmental barriers to health and well-being.” All must be examined in order to reduce the impact of oral and craniofacial diseases.
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References


Appendix A

Sense of Coherence Survey
Oral Health and Quality of Life Survey
Perceived Need Survey
Social Capital Survey
Demographics
Sense of Coherence

For each of the following items, please circle the number that best describes your opinion or how you feel.

1. Until now, the goals for your life have been:

   1  2  3  4  5  6  7  8  9  10
   Not at all clear  Somewhat clear  Quite clear  Very clear

2. Do you have the feeling that you don’t really care about what goes on around you?

   1  2  3  4  5  6  7  8  9  10
   Never  Sometimes  Often  All the time

3. Has it happened in the past that you were surprised by the behavior of people you thought you knew well?

   1  2  3  4  5  6  7  8  9  10
   Never  Sometimes  Often  All the time

4. Has it happened that people whom you counted on disappointed you?

   1  2  3  4  5  6  7  8  9  10
   Never  Sometimes  Often  All the time

5. Do you have the feeling that you’re being treated unfairly?

   1  2  3  4  5  6  7  8  9  10
   Never  Sometimes  Often  All the time

6. Do you have the feeling that you are in an unfamiliar situation and don’t know what to do?

   1  2  3  4  5  6  7  8  9  10
   Never  Sometimes  Often  All the time
7. Doing the things you do everyday is:

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<td>A source of pain and boredom</td>
<td>A source of deep pleasure</td>
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8. Do you often have very mixed-up feelings and ideas?

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9. Many people – even those with a strong character – sometimes feel like losers in certain situations. How often have you felt this way in the past?

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10. When something happens, have you generally found that:

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<td>You over or underestimate</td>
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11. How often do you have the feeling that there’s little meaning in the things you do in your daily life?

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12. How often do you have feelings that you’re not sure you can keep under control?

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**Oral Health and Quality of Life**

For each of the following items, please use the following scale to record an answer (in the blank provided to the left of each item). For all of these, I want you just to give me your best guess, and don't worry that you might be off a little. If you do not know how often you’ve experienced the situation, please write in ‘DK’.

1 2 3 4 5 6 7 8 9 10

Never Sometimes Often All the time

In the past month, how often have you:

_____ 1. Had trouble pronouncing any words because of problems with your teeth, mouth or dentures?

_____ 2. Felt that your sense of taste has worsened because of problems with your teeth, mouth and dentures?

_____ 3. Had painful aching in your mouth?

_____ 4. Found it uncomfortable to eat any foods because of problems with your teeth, mouth and dentures?

_____ 5. Been self-conscious foods because of problems with your teeth, mouth and dentures?

_____ 6. Felt tense because of problems with your teeth, mouth and dentures?

_____ 7. Has your diet been unsatisfactory because of problems with your teeth, mouth and dentures?

_____ 8. Had to interrupt meals unsatisfactory because of problems with your teeth, mouth and dentures?

_____ 9. Found it difficult to relax because of problems with your teeth, mouth and dentures?

_____ 10. Been a bit embarrassed because of problems with your teeth, mouth and dentures?

_____ 11. Been a bit irritable with other people because of problems with your teeth, mouth and dentures?

_____ 12. Had difficulty doing usual jobs because of problems with your teeth, mouth and dentures?

_____ 13. Felt that life in general was less satisfying because of problems with your teeth, mouth and dentures?

_____ 14. Been totally unable to function because of problems with your teeth, mouth and dentures?
Perceived Need

1. Do you feel that you are currently in need of dental treatment?
   _____ Yes  _____ No
   If you answered No to question 1, please skip to question 3.

2. How soon do you feel you need treatment?
   _____ Immediately
   _____ Within 6 months from now
   _____ More than 6 months from now
   _____ Not at all
   _____ Currently receiving treatment

3. During the past 12 months, have you had a dental problem which you would have liked to see a dentist about but you didn't see the dentist?
   _____ Yes  _____ No
   If you answered No to question 3, please skip to question 5.

4. Why didn't you see a dentist?
   _____ Didn't have time
   _____ Would cost too much
   _____ Couldn't get an appointment
   _____ Would have to travel too far
   _____ Didn't have a way to get there
   _____ Didn't have anyone to care for children or other family members
   _____ Didn't have insurance
   _____ Some other reason (please list) ________________________________

5. Do you think that your teeth need cleaning now by a dentist or dental hygienist?
   _____ Yes  _____ No

6. Do you think that you ought to go to a dentist now or very soon for a checkup?
   _____ Yes  _____ No

7. Do you now have an appointment to see a dentist?
   _____ Yes  _____ No

8. Do you think you have any teeth that need filling?
   _____ Yes  _____ No
9. Do you think you have any teeth that need to be pulled?
   ____ Yes  ____ No

   If you answered No to question 9, please skip to question 11.

10. How many teeth do you think need to be pulled?
    ____ Some  ____ All

11. What type of dental care do you need now? Please check all that apply.
    ____ Teeth filled or replaced (for example, fillings, crowns, and/or bridges)
    ____ Teeth pulled
    ____ Gum treatment
    ____ Denture work
    ____ Relief of pain
    ____ Work to improve appearance (for example, braces or bonding)
    ____ Cleaning
    ____ Other, (please specify) ____________________________________________
    ____ Nothing
Social Capital

We are conducting an important survey about life in communities across America including yours. We'd like to ask you some questions about how you view other people, groups and institutions. For each of the following items, please use the following scale to record an answer (in the blank provided to the left of each item).

<table>
<thead>
<tr>
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<th>1</th>
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<th>3</th>
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<th>8</th>
<th>9</th>
<th>10</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Do not trust them at all</td>
<td>Trust them a little</td>
<td>Trust them somewhat</td>
<td>Trust them a lot</td>
<td></td>
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</tbody>
</table>

1. Generally speaking, would you say that most other people can be trusted?

Next, we'd like to know how much you trust different groups of people.

2. How much do you trust the people in your neighborhood?

3. How much do you trust the police in your local community?

4. How much do you trust the people who work in the stores where you shop?

5. How much do you trust white people?

6. How much do you trust African Americans?

7. How much do you trust Hispanics/Latinos?

For the next questions, please place an ‘X’ or checkmark next to the statement that best represents your answer.

8. How interested are you in politics and national affairs?

   _____ Very interested
   _____ Somewhat interested
   _____ Only slightly interested
   _____ Not at all interested

9. How much of the time do you think you can trust the NATIONAL government to do what is right?

   _____ Just about always
   _____ Most of the time
   _____ Some of the time
   _____ Hardly ever

10. How much of the time do you think you can trust the LOCAL government to do what is right?

    _____ Just about always
    _____ Most of the time
    _____ Some of the time
    _____ Hardly ever
11. Thinking politically and socially, how would you describe your own general outlook?

_____ Very conservative
_____ Moderately conservative
_____ Middle-of-the-road
_____ Moderately liberal
_____ Very Liberal
_____ Other (please explain: ________________________________

Now I'm going to ask you how many times you've done certain things in the past 12 months, if at all. For all of these, I want you just to give me your best guess, and don't worry that you might be off a little. About how many times in the past 12 months have you:

12. Worked on a community project

_____ Never
_____ Once in the past year
_____ 2-4 times in the past year
_____ 5-9 times in the past year

13. Donated blood

_____ Never
_____ Once in the past year
_____ 2-4 times in the past year
_____ 5-9 times in the past year

14. Attended any public meeting in which there was discussion of town or school affairs

_____ Never
_____ Once in the past year
_____ 2-4 times in the past year
_____ 5-9 times in the past year

15. Attended a political meeting or rally

_____ Never
_____ Once in the past year
_____ 2-4 times in the past year
_____ 5-9 times in the past year

16. Attended any club or organizational meeting (not including meetings for work)

_____ Never
_____ Once in the past year
_____ 2-4 times in the past year
_____ 5-9 times in the past year
17. Had friends over to your home

- Never
- Once in the past year
- 2-4 times in the past year
- 5-9 times in the past year
- About once a month, on average
- Twice a month
- About once a week, on average
- More than once a week

18. Been in the home of a friend of a different race or had them in your home

- Never
- Once in the past year
- 2-4 times in the past year
- 5-9 times in the past year
- About once a month, on average
- Twice a month
- About once a week, on average
- More than once a week

19. Been in the home of someone of a different neighborhood or had them in your home

- Never
- Once in the past year
- 2-4 times in the past year
- 5-9 times in the past year
- About once a month, on average
- Twice a month
- About once a week, on average
- More than once a week

20. Been in the home of someone you consider to be a community leader or had one in your home

- Never
- Once in the past year
- 2-4 times in the past year
- 5-9 times in the past year
- About once a month, on average
- Twice a month
- About once a week, on average
- More than once a week

21. Volunteered

- Never
- Once in the past year
- 2-4 times in the past year
- 5-9 times in the past year
- About once a month, on average
- Twice a month
- About once a week, on average
- More than once a week

22. Not including weddings and funerals, how often have you attended religious services in the past year?

- Never
- Once in the past year
- 2-4 times in the past year
- 5-9 times in the past year
- About once a month, on average
- Twice a month
- About once a week, on average
- More than once a week
23. People and families contribute money, property or other assets for a wide variety of charitable purposes. During the past 12 months, approximately how much money did you and the other family members in your household contribute to all secular causes and all religious causes, including your local religious congregation

(By contribution, I mean a voluntary contribution with no intention of making a profit or obtaining goods or services for yourself.)

_____ None
_____ Less than $100
_____ $100 to less than $500
_____ $500 to less than $1000
_____ $1000 to less than $5000
_____ More than $5000

24. All things considered, how happy would you say you were?

_____ Very happy
_____ Happy
_____ Somewhat happy
_____ Not at all happy

25. How would you describe your overall state of health these days?

_____ Excellent
_____ Very Good
_____ Good
_____ Fair
_____ Poor

26. How much do you agree with the following statement? Television is my primary form of entertainment.

_____ Agree strongly
_____ Agree somewhat
_____ Neither/depends
_____ Disagree somewhat
_____ Disagree strongly
Demographics

1. Age: _________________

2. Gender: ______ Male  ______ Female

3. Are you an American citizen? ______ Yes  ______ No

4. Are you currently registered to vote? ______ Yes  ______ No

5. In the past twelve months, have you served as an officer or served on a committee of any local club or organization?  ______ Yes  ______ No

6. Year in school: ________________________

7. Do you have a GED or high school equivalency? ______ Yes  ______ No

8. Do you consider yourself: (check all that apply)

    ______ Hispanic or Latino
    ______ Mexican
    ______ Puerto Rican
    ______ Cuban
    ______ White
    ______ African American or Black
    ______ Asian or Pacific Islander
    ______ Alaskan Native/Native American
    ______ Chinese
    ______ Korean
    ______ Japanese
    ______ Filipino
    ______ Asian Indian
    ______ Vietnamese
    ______ Cambodian
    ______ Hmong
    ______ Other

9. Your annual average income is:

    ______ $20,000 or less
    ______ Over $20,000 but less than $30,000
    ______ $30,000 but less than $50,000
    ______ $50,000 but less than $75,000
    ______ $75,000 but less than $100,000
    ______ $100,000 or more
10. What is your current relationship status?
   _____ Currently married
   _____ Separated
   _____ Divorced
   _____ Widowed
   _____ Never Married

11. Do you own the place where you are living now, or do you rent?
   _____ Own
   _____ Rent