Notre Dame de Namur University Student Survey

The Redwood City Happiness Index

Fall 2005

Redwood City Happiness Index

Redwood City, California is located in the heart of the San Francisco Peninsula. A community comprising of about 75, 000 people, Redwood City is home to many high-tech companies. Redwood City is known for its rolling hillsides, great climate and a diverse community, which makes it a desirable place to live and work. The median age of the residents is 34. 8 years; 31.6% of the residents are below 24 years, 50% are between 25-54 years and 10 % of the residents are more than 65 years in age. Nearly half of the households are married households and nearly one-fourth of the households are single family households. More then 65% of the residents are college educated. The median household income is $66,748.

The Redwood City Happiness Index

The following students of the School of Business and Management, Notre Dame de Namur University, conducted the Redwood City Happiness Survey as a part of the course titled Business Analysis Using Spreadsheets. Besides enhancing student learning of data analysis, it gave them an opportunity to reflect on the attributes of a whole person and to make connections with the Redwood City community. The data collected by the students provides some interesting insights into how Redwood City residents feel about their own well-being. The students would like to thank the community for their time and support.

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I. SOME ATTRIBUTES OF THE SURVEY POPULATION

A total of 101 Redwood City residents participated in the written survey on Redwood City Happiness Index. The following is a look at the attributes of the survey population.
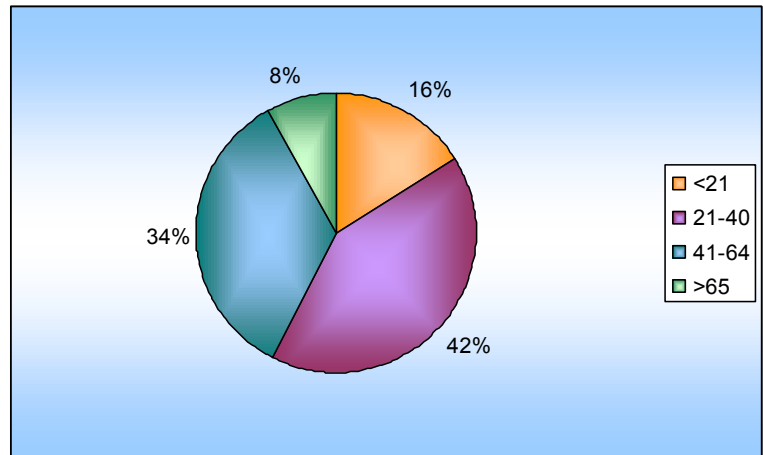
Gender
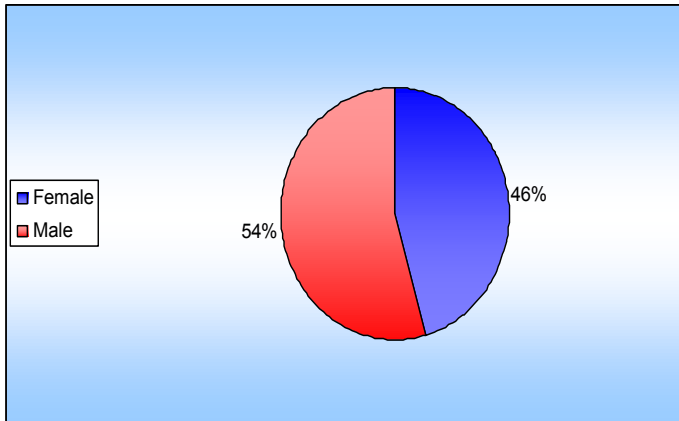
Of the total population surveyed, 54% were Males and 46% were Females.
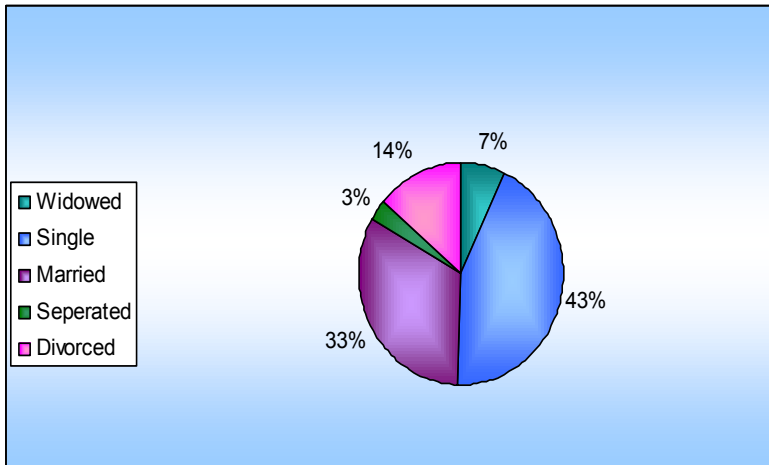
Age

Under 21:   16%
21-40:   42%
41-64:   34%
65 and over: 8%

Overall, the majority of the participants were between the ages of 21-40. The smallest group of people surveyed were those who were 65 years and older.


Marital Status

Single: 43%
Married: 33%
Divorced: 14%
Separated: 3%
Widowed: 7%

Of those surveyed, the majority (43%) were single. The second highest majority (33%) were married. The smallest group (3%) was those individuals that chose to identify themselves as separated.
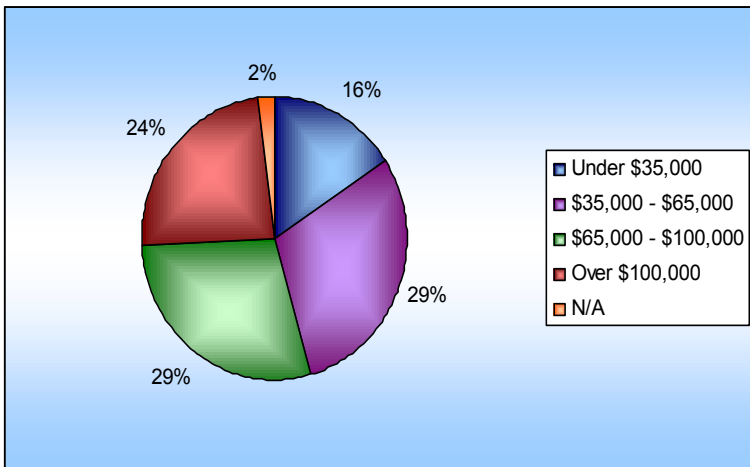
Education Level Completed

High school: 18%
Some college: 29%
Undergraduate: 31%
Graduate: 16%
Professional: 6%

Of the population surveyed, the majority (53%) had at least an undergraduate degree. The smallest percentage of the population (6%) possessed a professional degree.
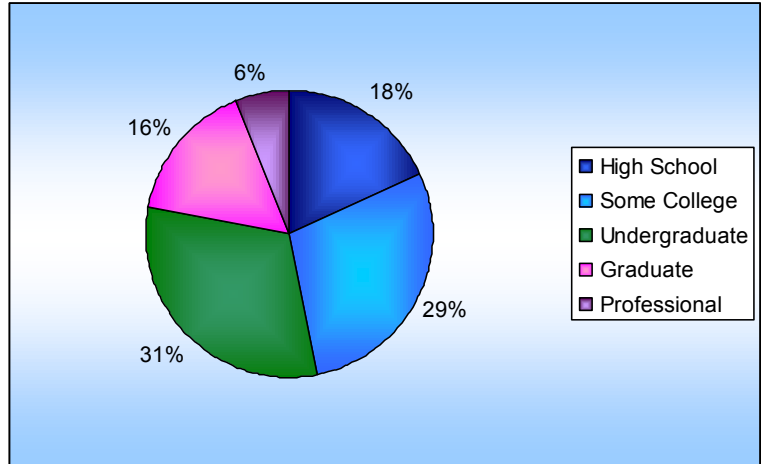
Combined Family Income

Under $35,000:   16%
$35,000 - $65,000:   29%
$65,000 - $100,000:   29%
Over $100,000:   24%
N/A: 2%

Overall, the highest percentage (29%) made between $35,000 and $65,000, as well as between $65,000 and $100,000. Approximately 2% of the survey population chose not to answer this question.

II. OVERVIEW OF THE SURVEY RESULTS

The Happiness Survey consisted of 11 questions that depict the overall level of well-being of Redwood City residents. Each question measured a level of happiness based upon the participants' satisfaction. The more satisfied the participant, the higher the score. All scores were based on a 1-5 scale, with 5 representing happiness and 1 representing unhappiness. Our overall findings were that the residents of Redwood City are moderately happy, indicated by an overall *Happiness Index of 3.48*, out of a possible 5.

Survey Results

Of the 11 questions analyzed, the residents were unhappiest with the amount of leisure time they had. They also expressed unhappiness with their stress levels. They were happiest with their personal relationships and friendships and admitted to laughing a lot. The following graph gives the average scores for all the questions on the survey.
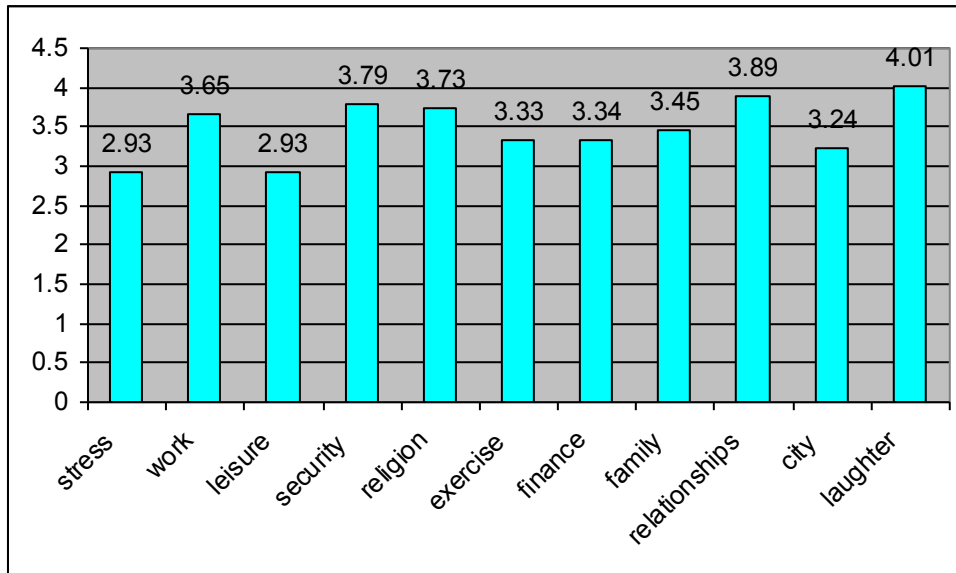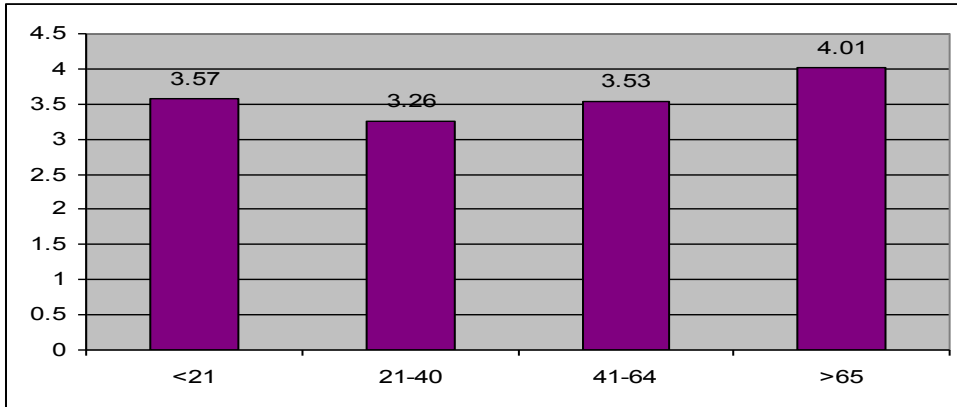

A. Gender and Happiness Index:
In terms of gender, Females scored marginally higher score of 3.50 compared to males, who scored 3.46.

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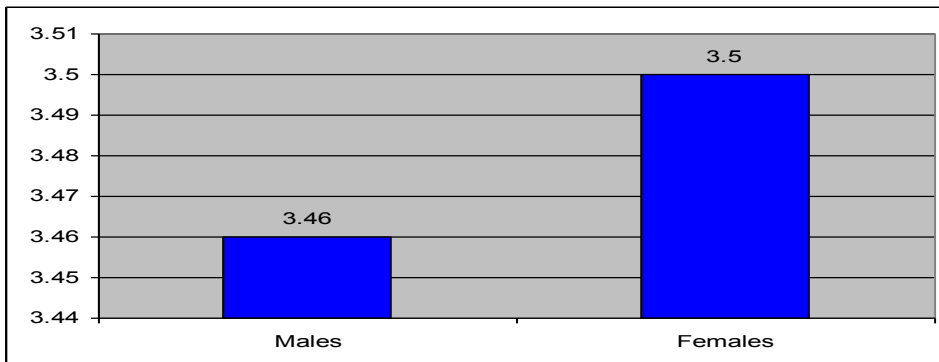
B. Age and Happiness Index
Age-wise, the happiest people in Redwood City are those over 65 years of age with an average score of over 4. In the graph shown below, the unhappiest group is represented by those between 21 -40 years in age.

C. Combined Family income and Happiness Index
Are the rich happier? According to the income distribution shown below, those with a combined family income of above $ 100,000 scored the highest.
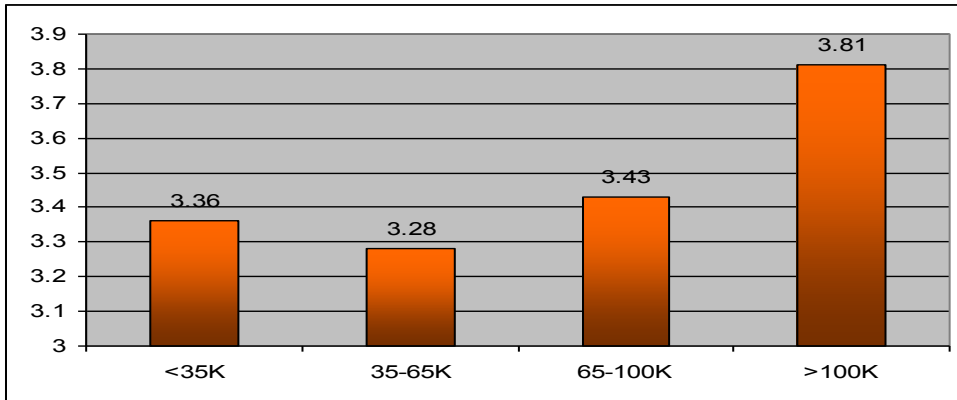
D. Education Level and Happiness Index
Professionals are the happiest section among the Redwood City survey participants, as shown in the following graph. Among the least happy are high school graduates.

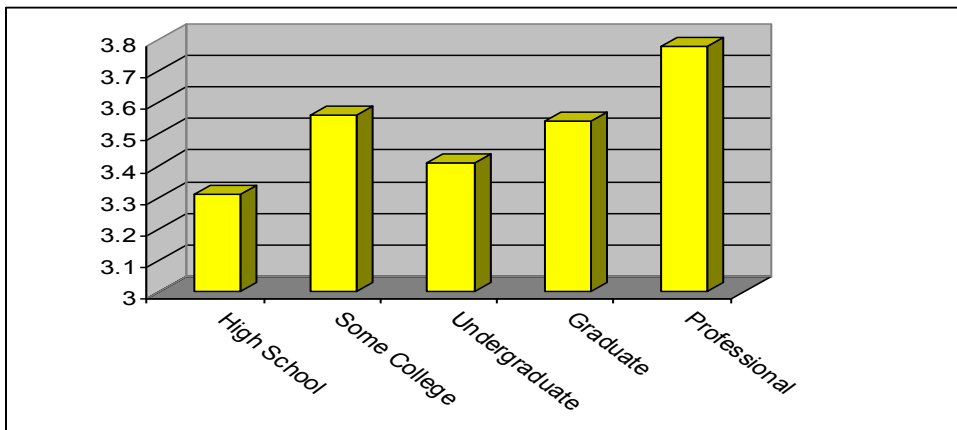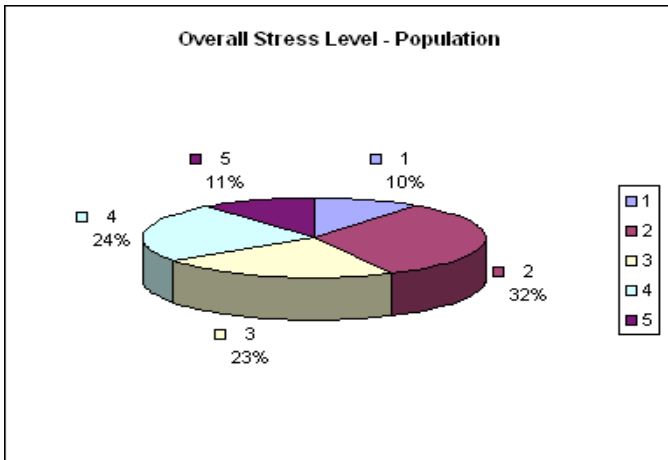# III. Detailed Analysis of the Survey Questions

1. Stress Level and Happiness

Why is it relevant?
Stress weighs on the mind and emotions of individuals and directly effects the mood and overall happiness of individuals. Low stress has a direct correlation with overall happiness and vice versa.

Survey Results

Graph A represents the overall stress level of the surveyed population in Redwood City, CA. The highest percentage of responses was 2 which represents a moderately high stress level. The next highest percentage of responses fell within the 3 and 4 range, which represents a moderate and moderately low level of stress. The lowest percentage of responses fell within the 1 and 5 range, which represent a very high and very low level of stress. The results of this survey were not surprising as Redwood City is very busy in terms of commerce and education which attribute to the stress in the respondents lives.   Gr

* Graph A represents Redwood City's overall stress level measured 1 through 5, 5 representing a stress free life through 1 representing a very stressful life

Graph B - Stress and Age
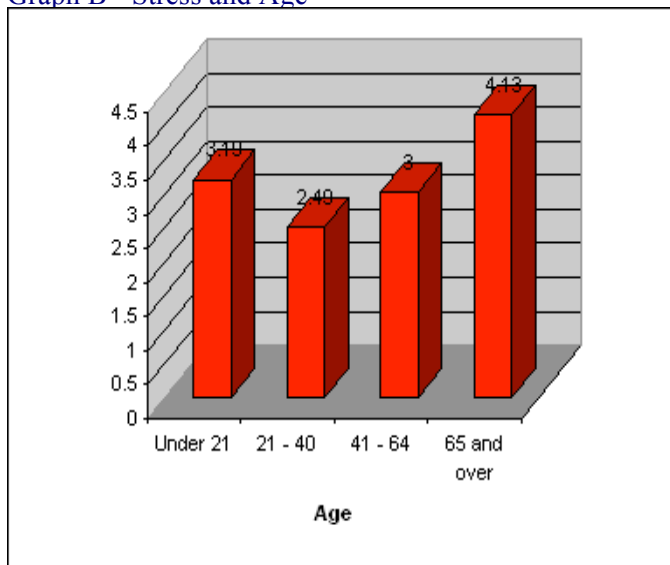
Graph B represents Redwood City's stress level associated with age. Clearly respondents within the 65 and over age bracket feel the least stressed. This can most likely be attributed to the fact that most of these individuals are retired and enjoy a lower stress level. The highest stress levels belong to the 21 - 40 age bracket and the 41 - 64 age bracket. This is most likely attributed to the fact that these individuals are either working, in school, or both.

2. Work Conditions and Happiness

Why is it relevant?

Question 2 on the Redwood City Happiness Survey asked respondents to answer, on a scale of 1-5 (1 being 'strongly disagree' to 5 being 'strongly agree'), how much the statement "I am satisfied with my current work conditions" applies to them. This question is relevant because people spend one-third of their daily lives at work. For this reason, an individual's work conditions can have a great impact on their overall happiness level.

Survey Results

The graph to the right illustrates the percentage of respondents who answered each of the possible ratings. According to the graph, 18% of those surveyed 'strongly agree' with the statement, and 43% 'agree'. That accounts for 61% of the responses. The remaining was as follows: 21% of respondents feel neutral, 11% 'disagree' and 3% 'strongly disagree.' This shows that the residents of Redwood City are generally satisfied with their work conditions.
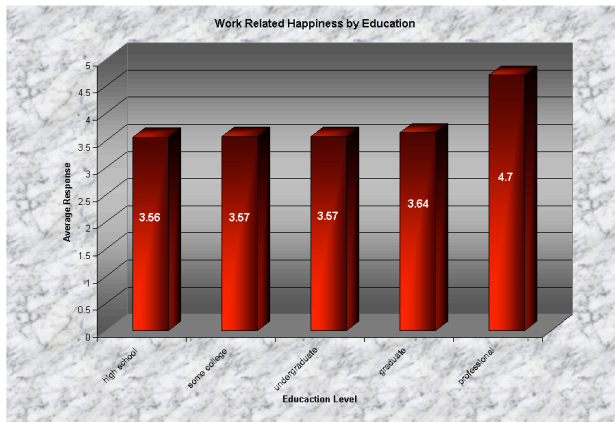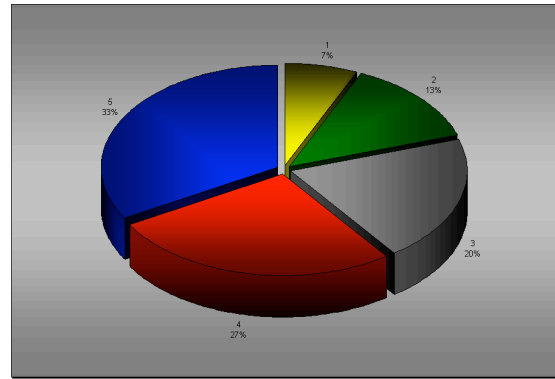
The graph to the left illustrates the average satisfaction responses in relation to highest level of education completed. There is a noticeable relationship between education levels and satisfaction. The highest rating (4.7) came from those with a professional degree. The lowest rating (3.56) came from those with a high school diploma.

The graph to the right represents the level of work condition satisfaction in relation to income. This graph gives an excellent visual representation of the different demographic groups and their response as an average. As with the Education graph, this graph shows that as income increased, so did the average response to satisfaction with work conditions.
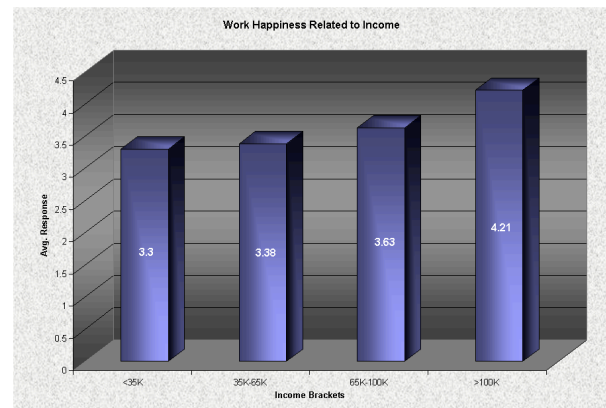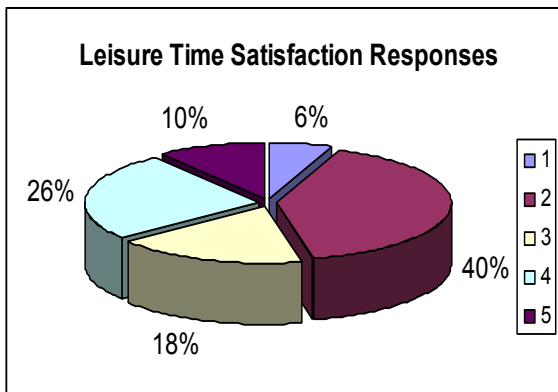
3. Leisure Time and Happiness

Why is it relevant?

Leisure is time spent doing non-compulsory activities. It is free time for an individual to do something that will help him/her relax and, most likely, bring them personal fulfillment. Often people spend their leisure time hanging out with their friends and families, exercising, reading, etc. As an essential factor of one's happiness, it is important to survey individuals' satisfaction with their amount of leisure time.

Survey Results…

Leisure Time Satisfaction Responses

From the 101 responses we received in the Redwood City Happiness Survey, these are the results for the following question: "I am satisfied with my amount of leisure time".

Strongly Disagree	6%
Disagree	40%
Neutral	18%
Agree	26%
Strongly Agree	10%

On a happiness scale from 1 to 5 (1=very unhappy, 5=very happy), we discovered that almost half (46%) of the people surveyed indicated that they are unhappy or dissatisfied with their amount of leisure time. On the other hand, 36% of the people said that they are happy or very happy with their amount of leisure time. 18% of the people surveyed chose to remain neutral about the subject.

Based on the chart to the right, we were able to determine whether there is a correlation between a person's age and their satisfaction with their leisure time. The data shows the happiness index of four different age groups as follows:

Less than 21	3.06
21 – 40	2.37
41 – 64	3.15
Greater than 64	4.50

Leisure Time Happiness by Age
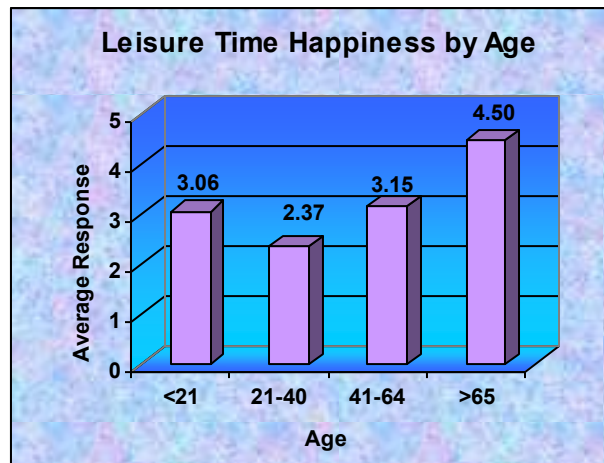
It is clear that the group that is the most happy with their amount of leisure time is the group of people over the age of 65. This makes sense because most people in that age group are retired and tend to have a lot of free time. The least satisfied with their amount of leisure time was the group from ages 21 to 40. People between the ages of 41 and 64, and those younger than 21, were neutral about their leisure time.

4. Security and Happiness

Why Is It Relevant?

Question four of the Redwood City Happiness Survey states, "I feel secure within my community." Security is defined as the state or feeling of being safe and protected. It is very difficult to feel happy, and enjoy your environment if you do not feel secure in that environment. A person who is secure with their surroundings will have significantly less stress and they will be able to enjoy a much happier lifestyle because they will not constantly have to worry about their safety.

Survey Results:

Statistical information gathered from 101 Redwood City residents, on a scale between 1 and 5, '5' being 'Strongly Agree' and '1' being 'Strongly Disagree'; we discovered that the majority of the population feels secure. According to the survey, 23% strongly agreed, 46% agreed, 21% were neutral, 7% disagreed and 3% strongly disagreed.

Population Level of Security
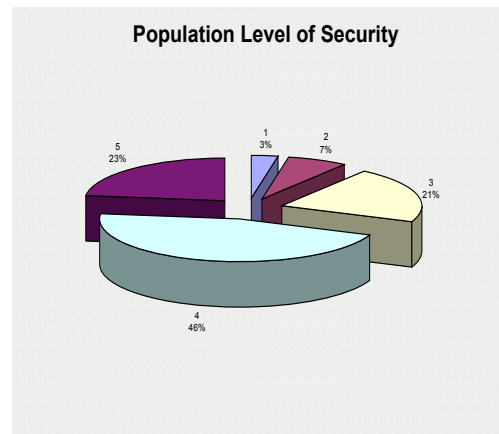
Statistical information collected also shows a clear correlation between income and security. On average, the level of security rises as the level of income goes up.

<35K	3.25
35K-65K	3.7
65K-100K	3.75
>100K	4.3

Income & Security

Gender & Security
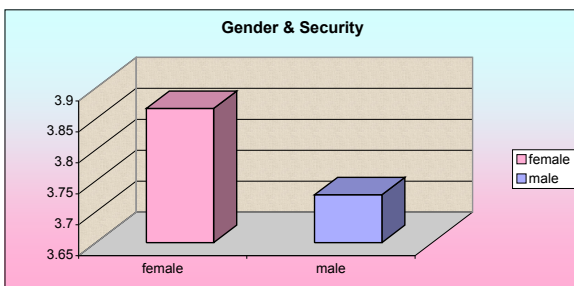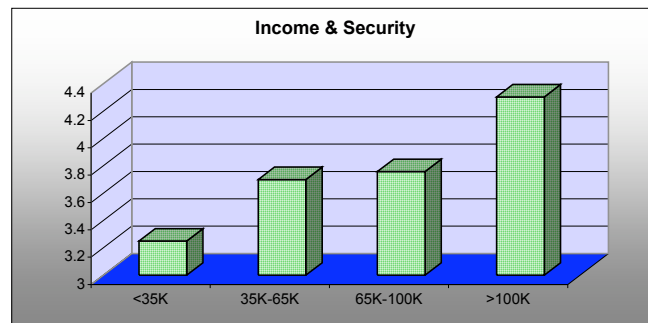
From the data collected, it is obvious that women feel more secure than men in Redwood City. Women had an average security level of 3.87, while men and an average security level of 3.73.

| Female | 3.87 |
| Male | 3.73 |

5. Religious Fulfillment and Happiness

Why Is It Relevant?

Attending a Catholic university, religion is already a part of our lives. But how important is it to those in our neighboring communities? That was the fifth question on the "Happiness Survey" presented to the residents of Redwood City and it read as follows: "I am satisfied with my religious life". The rating was on a scale of 1 – 5 with 1 meaning that the people strongly disagree with the statement, and 5 meaning that they strongly agree with the statement. There were a total of 101 people surveyed. And so let's go on to take a look at the results and see if there is any correlation between overall happiness and religious satisfaction.

Survey Results…

When it came down to the results, only a total of 6% of those surveyed were slightly or strongly dissatisfied which in turn shows that the people of Redwood City are fairly satisfied with their religious life and as many as 24% of them answered that they were very satisfied with their religious life. Surprisingly most people said that they were neutral on the subject, which could also mean that religion just may not be a large part of their life, yet they accept that and do not take in a bad way.

Strongly Disagree	1%
Disagree	5%
Neutral	37%
Agree	33%
Strongly Agree	24%

Religion Happiness

Legend: Strongly Disagree · Disagree · Neutral · Agree · Strongly Agree
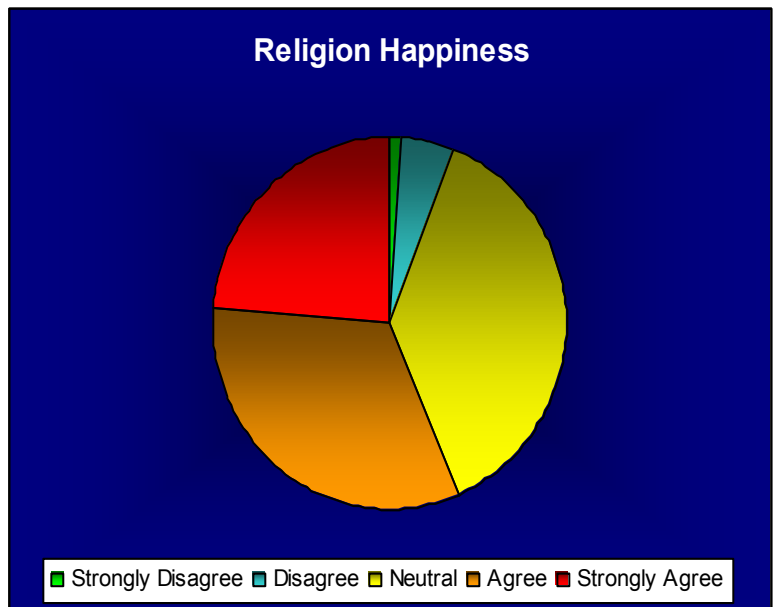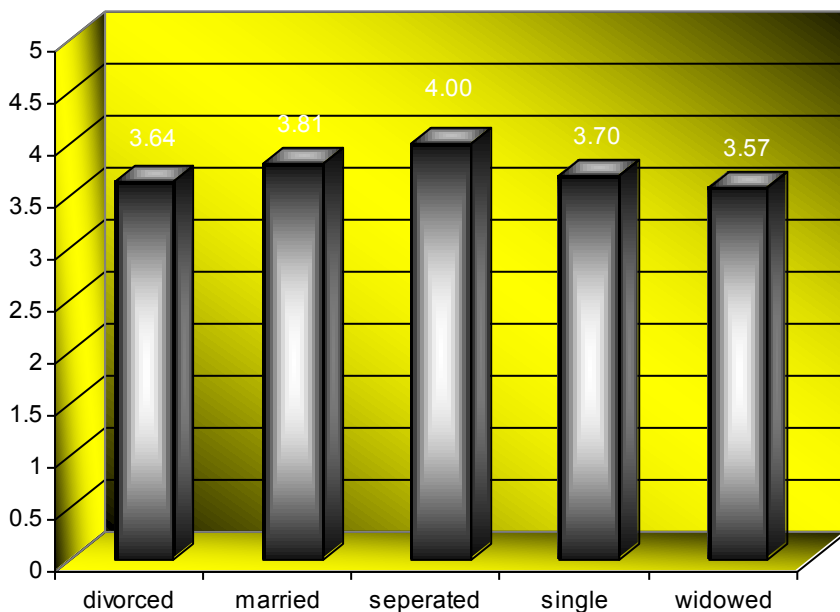
Marital Status

It was also interesting to learn that there seems to be a connection between the people's marital status and their religious satisfaction. The people who are separated seem to be the most satisfied with their religious life with an average score of 4.00, while the people who are widowed seem to be the least satisfied with their religious life with an average rating of 3.57. Those who are divorced also weren't very satisfied with their religious life as their average came out to 3.64. On the other hand married people were also fairly satisfied with their religious life with an average score of 3.81. Finally, the singles seemed to be right in the middle with an average rating of 3.70.

Status	Rating
Divorced	3.64
Married	3.81
Separated	4.00
Single	3.70
Widowed	3.57

Bar chart values: divorced 3.64, married 3.81, separated 4.00, single 3.70, widowed 3.57

6. Exercise and Happiness

Why is it relevant?

Regular exercise is tightly connected to one's happiness because it relieves the stress and helps maintain a healthy lifestyle. Being in good shape plays an important role in one's everyday life for it determines a person's energy level and gives him or her a positive outlook on life. Nowadays, life has become so dynamic and stressful that people rarely have much time for themselves. However, regular exercise helps reduce the stress and gives one a better focus and motivation. Therefore, exercise can have a huge impact on a person by boosting his or her attitude and confidence level.

Survey Results…

Redwood City residents were asked whether they agreed with the statement that they exercise often. Answers were graded on a scale of 1 to 5, with 1 being strongly disagree and 5 being strongly agree.

The pie chart reflects the percentage of sample respondents' frequency of exercise, with 8% strongly disagreeing with the statement, 23% disagreeing, 15% neutral, 36% agreeing, and 18% strongly agreeing.

How Often Do You Exercise?

Exercise and Marital Status
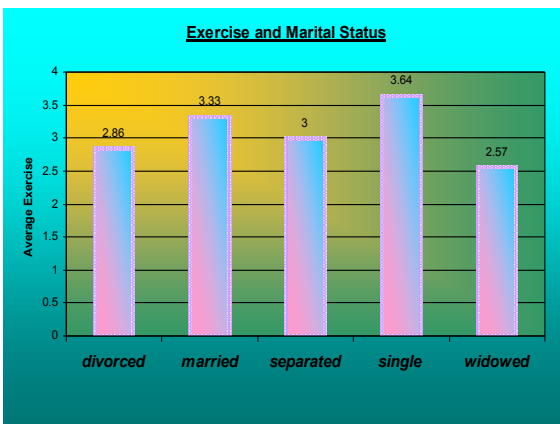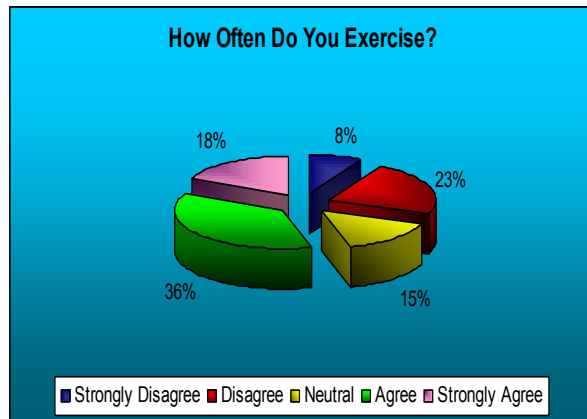
We further analyzed the data across the respondents' age, marital status, gender, education level, and income. According to the data we collected, we found that people under the age of 21 exercise the most, with a weighted average of 3.81. Overall, all age groups had a weighted average over 3, which indicates that almost all of the respondents agreed that they exercise often. As the bar chart reveals, single people exercise the most, showing a weighted average of 3.64, followed by married, separated, divorced, and widowed.

When it comes to gender, the survey revealed that females exercise more often than males, with a weighted average of 3.41 compared to 3.27. In terms of education level, we found that people with some college, and professional education, as well as the undergraduates, exercise more frequently than people with high school and graduate education. The correlation between income and frequency of exercise was not really significant.

Frequency of Exercise According to Age
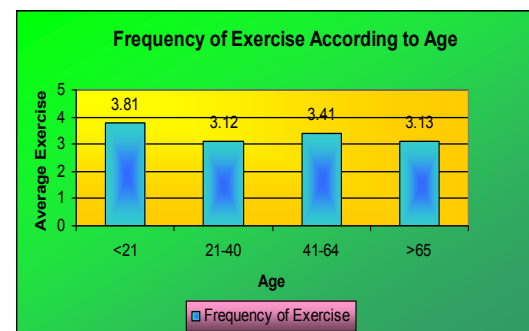
7. Financial Stability and Happiness

Why Is It Relevant?

Question 7 on the Redwood City Happiness Survey states "I feel financially stable" and residents were asked to rate their feeling on this answer to a scale of 1-5, 1 being that they strongly disagree and 5 being that they strongly agree. This question is relevant because financial stability can be an important factor in an individuals' happiness level.
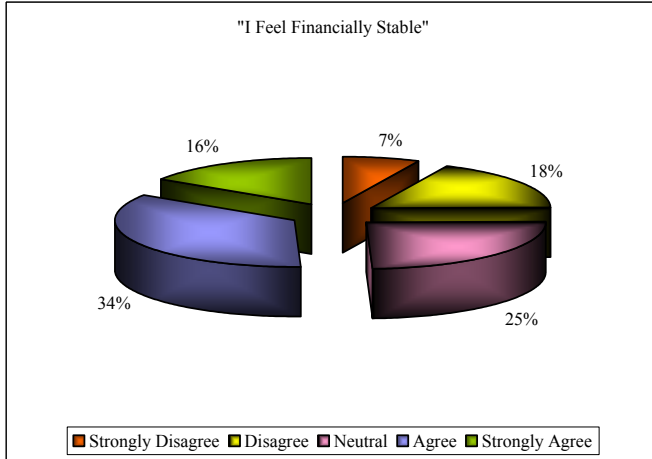
Survey Results

From 101 Redwood City residents surveyed, the results were split evenly. 50% of the residents responded as either "strongly agree" or "agree," indicating their happiness level with their current financial situation. 25% of the population felt neutral on the question, 18% were somewhat unhappy, and the remaining 7% were very unhappy.

The graph to the right illustrates average happiness with financial stability by age level. As you can see, people over the age of 65 were the group that felt most stable in their finances with an average answer of 4.12. Those that were least satisfied with their financial stability were the group that was under 21 with an average answer of 2.93. These results illustrate an average rise in feeling financially stable as you get older.
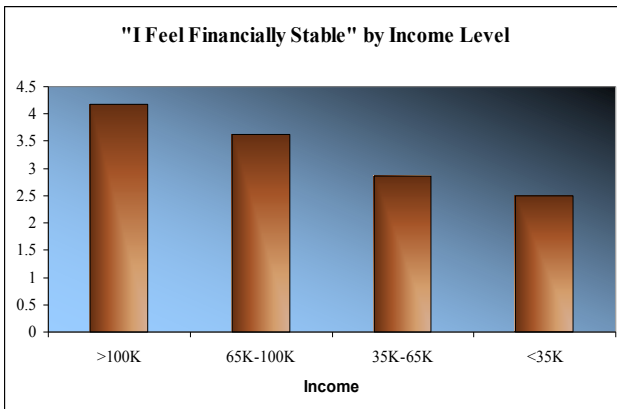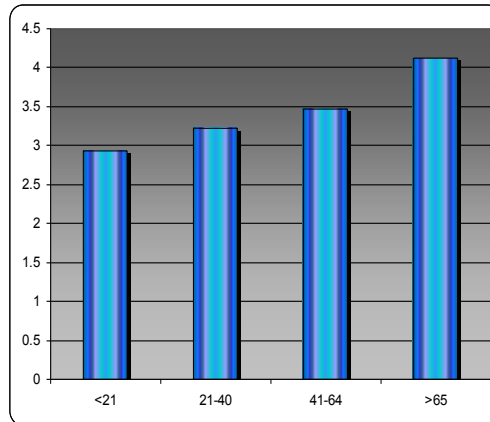
The graph at the left illustrates the answer of financial stability by income level. We expected that people would be more secure with their income as it rises, which the results did match. People that made more than 100K were the happiest, with an average answer of 4.16. Those that were least happy were those people making less thank 35K per year, with an average answer of 2.5.
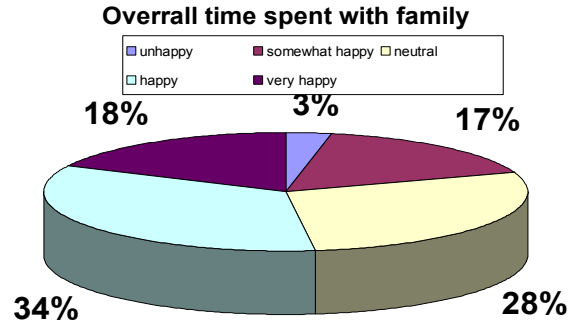
8. Time Spent with Family and Happiness

Why is it relevant?

The amount of time that is spent with the family corresponds with the happiness level of a person. On the Redwood City happiness survey, people were asked to rate the question, "I spend an adequate amount of time with family". They were asked to rate the question on a scale from 1 - 5. The survey helps explain how time spent with the family relates to happiness.

Survey Results

From the 101 people that were surveyed the following graph shows how many of them strongly agreed with the amount of time they spent with their family. From the overall graph 18% people were very happy with the amount of time that they spent with their family and 34% of them were happy. 28% of them were neutral. 20% of the respondents were unhappy with the time spent with their family.

Overrall time spent with family
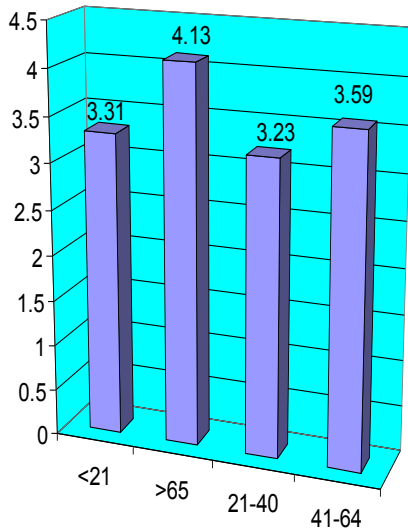
The graph on the left, titled Time spent with Family by age, illustrates average happiness with time spent with family by age level. As shown in the graph as age rises we can see that people are happier with the amount of time that they spend with their family. People that are less than 21 show an average happiness of 3.31 and people who are 21 - 40 show an average of 3.21. As people get older they seem to be happier with the amount of time spent with the family. People 41 - 60 show an average of 3.59 and people greater than 65 had the greatest average of 4.13. People who are older tend to spend more time with they're family because as older people may be parents and it is they're responsibility to look over the family.

# 9. Satisfaction with Relationships and Happiness

Why Is It Relevant?

Question 9 of the Redwood City Happiness survey reads, "I am satisfied with my friendship and/or my personal relationships. This question is relevant because if a person is happy with his or her friendship and personal relationships, then he or she will most likely live a much more content life. On the other side, people who have a poor relationship, tend to be less happy.

Survey Results…

From the 101 Redwood City residents we surveyed 46 females and 55 males. On a scale between 1 and 5, '5' being 'Strongly Agree' and '1' being 'Strongly Disagree', we found out that over 50% of the surveyed residents were happy with their personal relationships. 29% of the residents surveyed were unhappy with their personal relationships. 18% were neutral about their personal relationships. 44% were happy about their personal relationships. Lastly, 28% were very happy about their personal relationships.

Strongly Disagree	1%
Disagree	9%
Neutral	18%
Agree	44%
Strongly Agree	28%

Overall Relationship


Relationship and Marital Status
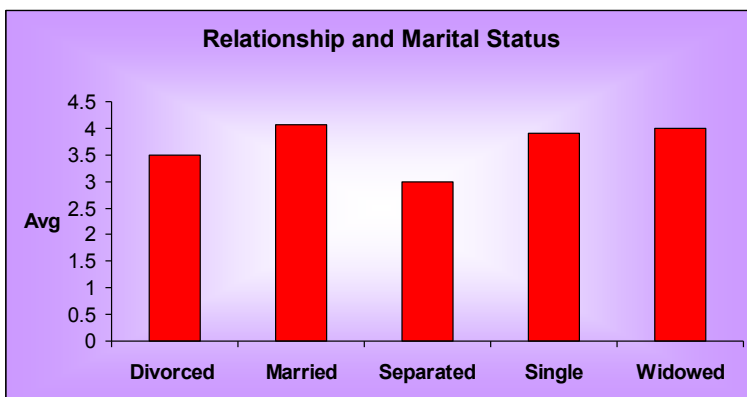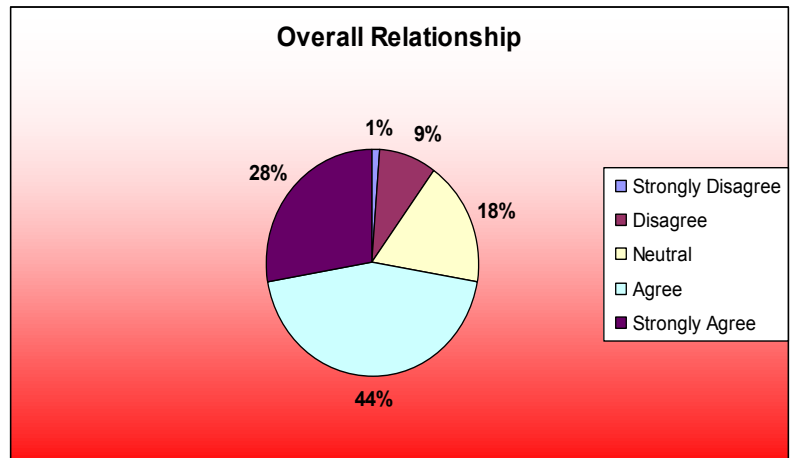
From the data, the residents of Redwood City averaged a score of 3.89 out of 5 based on their martial status, 1 being not very happy and 5 being happy. That means that they have a relationship between neutral and happy. Residents that are divorced had an average of 3.50. Residents that are married had an average of 4.06. Residents that are separated had an average of 3.00. Residents that are single had an average of 3.93. Residents that are widowed have an average 4.00. Residents that are married have the highest average and are the most happy with their personal relationships.

Divorced	14	3.50 avg
Married	33	4.06 avg
Separated	3	3.00 avg
Single	44	3.93 avg
Widowed	7	4.00 avg

Based on age level, Redwood City residents averaged a score of 3.87 out of 5, 1 being not very happy and 5 being happy. It means based on their education level they are between neutral and happy. Two residents decided not to answer this question, so it is out of 99 instead of 101. Residents that are less than 21 have an average of 4.31. Residents that are between 21 and 40 have an average of 3.68. Residents that are between 41 and 64 have an average of 3.82. Residents over 65 have an average of 4.25. On average, residents under 21 are the most happy and residents between the ages of 21 and 40 are the least happy.
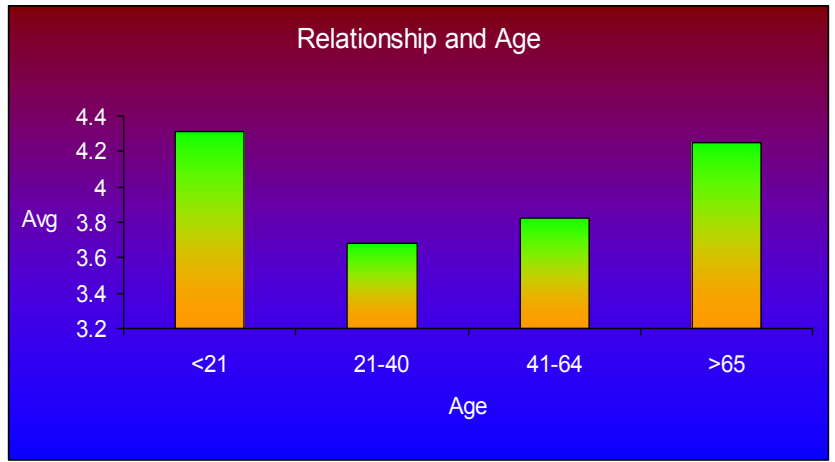
<21	16	4.31 avg
21-40	41	3.68 avg
41-64	34	3.82 avg
>65	8	4.25 avg
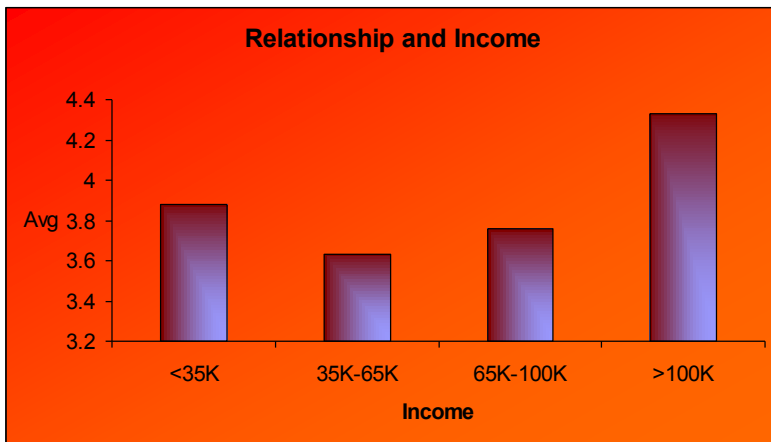
Based on income, Redwood City residents averaged a score of 3.87 out of 5, 1 being not very happy and 5 being happy. That means that they are between neutral and happy. 2 residents did not answer this question, so it is out of 99 instead of 101 residents. Residents that made less than $35K per year had an average happiness of 3.88. Residents that made between $35K and 65K had an average of 3.63. Residents that had an income of $65K to $100K had an average of 3.76. Lastly, residents who made over $100K had an average of 4.33. Except for the residents who made less than $35K per year who had the second highest average, the more money a resident made, and the happier he or she is.

<35K	16	3.88 avg
35K-65K	30	3.63 avg
65K-100K	29	3.76 avg
>100K	24	4.33 avg

# 10. Satisfaction with Redwood City and Happiness

Why is it Relevant?

This question is important to one's overall happiness in life because where you live affects your happiness. Services that a city may provide include public transportation, police and medical services, public schools and funding, maintenance, etc. Based on different variables like age, income, and education, one can determine how well the city provides service for the individual within Redwood City.

Survey Results…

Satisfaction of City Service
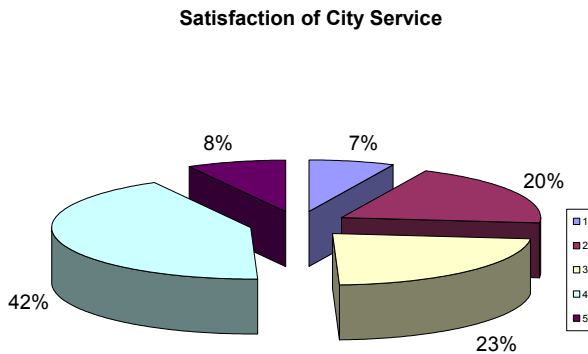
This Graph shows the Redwood City's overall satisfaction with city services provided. Using a 1 to 5 scale, the majority of those surveyed, 42%, chose 4 or were "satisfied" with city services. This seems to be a fairly accurate result because RWC is a very clean and pleasant place.

Very Unsatisfied	7
Unsatisfied	20
Neutral	23
Satisfied	43
Very Satisfied	8
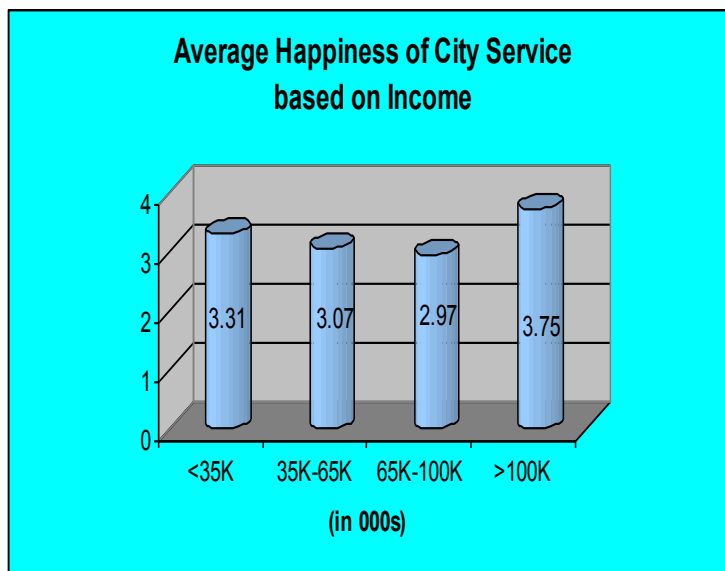
This Graph shows the average happiness of Residents from Redwood City's in concerns with its given services. It seems that those with over $100,000 income are more pleased with city services. But, those with less than $35,000 are also very satisfied. This could be for various reasons such as: wealthier people wanting to add on to their homes and the city regulations are easy to abide by; or there are well put together programs by the city to help those in welfare.

|	
<35K	3.31
35K-65K	3.07
65K-100K	2.97
>100K	3.75

11. Laughter & Happiness

Why is it relevant?

Laughter is an important indicator of happiness and this is why we chose to include the statement "I laugh a lot" in the Redwood City Happiness survey. This question is relevant because people who are happy generally laugh more.

Survey results…

A total of 101 residents of Redwood City responded to the statement "I laugh a lot" according to a scale of 1 to 5: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. The overall index is 4.01 which is equivalent to the response "agree".

The graph to the right illustrates the percentage of respondents who answered each of the possible ratings. According to the graph, 41% of those surveyed agreed with the statement and 33% strongly agreed. 20 % of the respondents felt neutral about the statement. No respondent strongly disagreed with the statement and only 6% disagreed.

This shows that the residents of Redwood City generally laugh a lot.
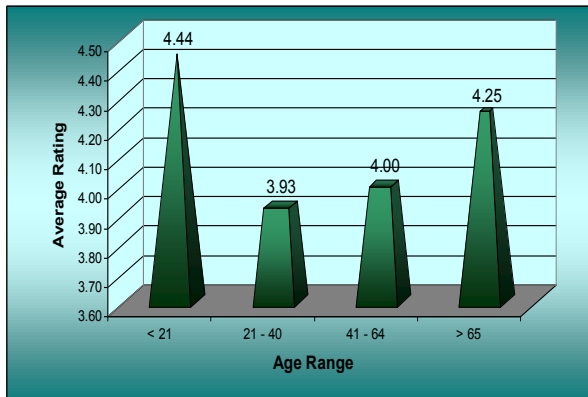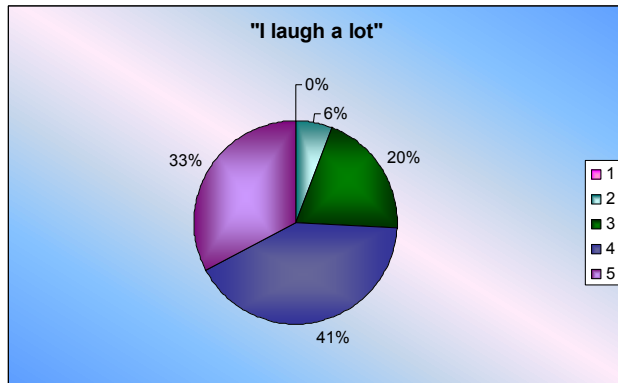
The graph to the left illustrates the average laughter ratings in relation to various age groups. The highest rating (4.44) came from those who identified themselves as under the age of 21. There appears to be a decline in the average laughter rating when moving out of the under 21 category. The lowest rating (3.93) comes from those between the ages of 21 and 40. It appears, however, that respondents then tend to laugh more as they get older, with those over 65 having an impressive rank of 4.25.

The graph to the right represents the level of laughter in relation to marital status. This graph gives an excellent visual representation of the different demographic groups and their response as a percentage of that group's total response. The largest percentage of respondents who strongly agreed with the statement was single. The average ratings for the various groups are: single (4.32); married (3.85); divorced (3.64); separated (3.00); and widowed (4.00).