



Wello 2023 Community Health and Well-Being Survey

Stratified Analysis: Gender
May 2024

Background

The Wello Community Health and Well-Being Survey partners with researchers at the Strategic Research Institute at St. Norbert College. The survey is based on an adapted version of the World Health Organization's Quality of Life - BREF (WHOQOL-BREF) survey, with added demographic and regionally specific open-ended questions. Institutional Review Board (IRB) approval was obtained by the research team from Wello and St. Norbert College to conduct the community-wide survey. The IRB is an administrative body that protects the rights and welfare of human research subjects in research activities.

This community-wide survey is completed bi-annually. The baseline survey was originally piloted and tested in the fall of 2018, with full implementation of the survey completed in summer 2019. This survey was administered over a six-week period between July 15 and August 31, 2023 at in-person community events and gathering spaces, through email distribution from local companies and organizations, during community events, through members of the community, and with print, television and social media campaigns. The survey took, on average, less than 10 minutes to complete and was available in English and Spanish. To be eligible for the survey, individuals had to be 18 years of age or older. The survey was available to anyone across Northeast, Wisconsin to complete, however, analysis was completed only on respondents with Brown County, Wisconsin zip codes.

The Wello Community Health and Well-being survey seeks to collect data that can build an overall picture of collective well-being in Brown County. Measures include Cantril's Self-Anchoring Striving Scale that assess thriving, struggling, and suffering, subjective data - how people feel about their lives - in four different areas: physical health, psychological health, social relationships and the environments in which people live, learn, work and play, as well as a set of community condition data based on areas of local interest.

Local data collection via this survey instrument is scheduled to occur again in July of 2025.

Survey Analysis

The Wello Community Health and Well-Being survey was analyzed using two different methods of analysis.

Weighted, Descriptive Statistic Data

Data was weighted to align with Brown County, Wisconsin demographics. Demographic information for Brown County was obtained from the American Community Survey 5-year estimates (2018 – 2022). The same demographic weighting categories that were used for the 2019 and 2021 surveys were used for the 2023 analysis - age, self identified gender, race/ethnicity, and formal educational attainment. All the results are presented using weighted data.

Logistic Regression Data

Logistic regression is a predictive analysis technique used to understand the probability, or odds, or a particular outcome occurring.

Survey outcomes were fitted with crude models for each demographic predictor variable. Variables exhibiting a significant ($p < 0.05$) effect in the crude model were included in the multivariate model. Regression models were achieved through a stepwise subtractive method. Non-significant variables were determined to be confounders if their inclusion in the model changed significant effects $\geq 10\%$. All variables were further tested for effect modification.

Logistic regression requires dichotomization of the data, meaning, there are two possible outcomes. The 2023 Wello Community Health and Well-Being survey metrics were dichotomized before logistic regression. This information is available upon request.

How to understand the findings of logistic regression

This analysis allows us to present findings that are significant **regardless of other demographic factors**. Findings are shown as odds ratios.

Gender identification

Survey respondents were asked to identify their gender. Choices included: *Male*, *Female*, and *Non-binary/ third gender*. A fourth choice, Prefer to self-describe, allowed respondents to express their gender using their own words. Male and female were the only genders garnering sufficient response numbers to allow for stratified analysis.

Wello Community Health and Well-Being Survey, 2023

Selected Survey Demographics (Unweighted)

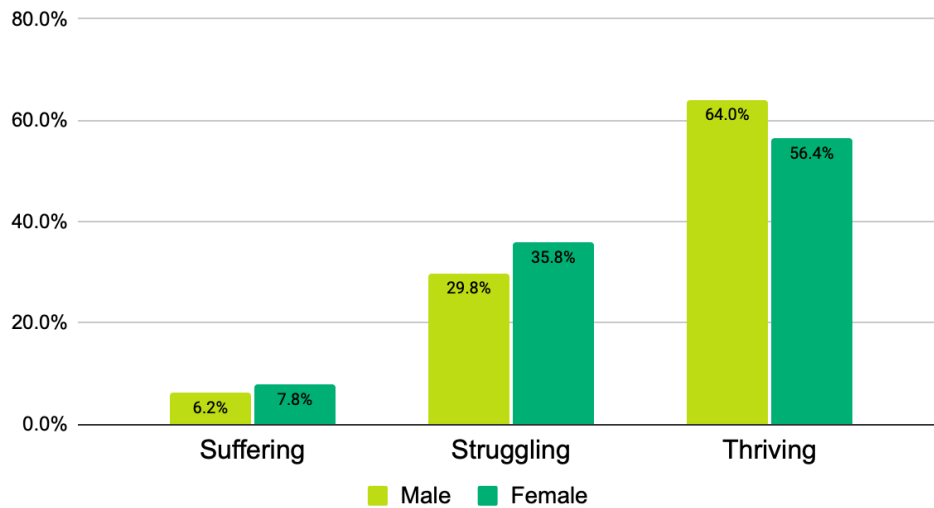
Variable	Description	2023 Wello Survey	Brown County
Age and gender			
	Male, 18 - 64	22.8%	38.9%
	Female, 18 - 64	62.7%	40.0%
	Male, 65+	4.5%	9.5%
	Female, 65+	8.9%	11.6%
	Nonbinary, 18 - 64	1.1%	not measured
LGBTQ+ Status			
	Yes	13.2%	not measured
	No	86.8%	not measured
Race/ Ethnicity			
	Asian	3.0%	3.1%
	Black	6.0%	2.6%
	Hawaiian/ PI	0.1%	< 0.1%
	Hispanic/ Latino	9.8%	9.4%
	Mixed race	1.2%	3.9%
	Native American	1.7%	1.7%
	White	78.3%	78.9%
	Other	0.0%	0.3%
Marital Status			
	Divorced/ Separated	12.8%	12.4%
	Married	62.1%	49.8%
	Single	22.1%	32.9%
	Widowed	3.1%	4.9%
Employment			
	Currently employed	80.3%	66.3%
	Not currently employed	19.7%	33.7%
Formal Education			
	Less than High School	4.5%	7.1%
	High School Graduate	9.7%	29.5%
	Some College	22.4%	31.6%
	College Graduate	37.8%	22.2%
	Graduate Degree	25.5%	9.5%

Note: The data was weighted to align with Brown County, Wisconsin demographics. Demographic information for Brown County was obtained from the American Community Survey 5-year estimates (2018 – 2022). These are the same demographic weighting categories that were used for the 2019 and 2021 survey analysis - self identified gender, race/ethnicity, and formal educational attainment. All the results are presented using weighted data.

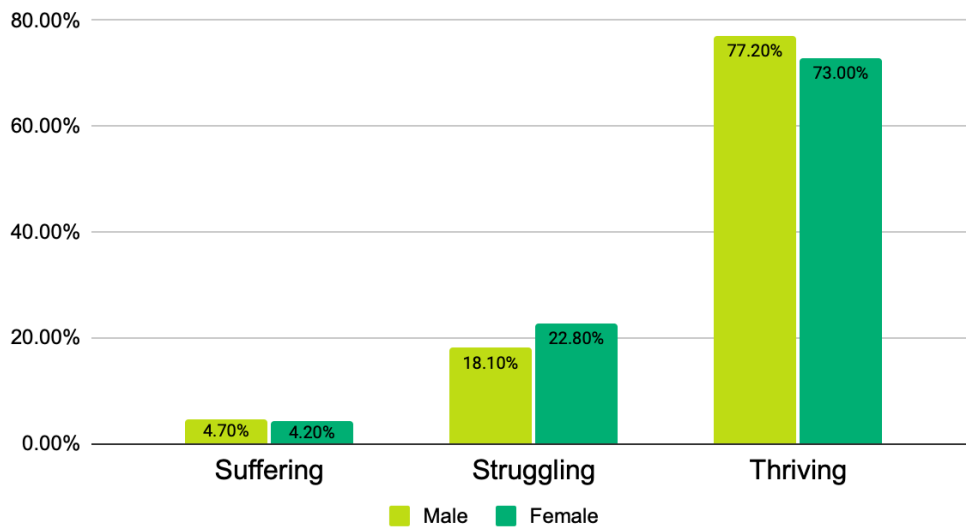
Cantril Self-Anchoring Striving Scale

The Cantril Self- Anchoring Striving Scale asks respondents to think of a ladder, with the best possible life for them being a 10 and the worst possible life being a 0. Respondents are asked to rate their own current lives on that 0 to 10 scale. They are then asked to predict their lives five years in the future using the same 0 to 10 scale. Scores can be broken down to represent groups who are thriving (scores ≥ 7), struggling (scores from 4 to 6), or suffering (scores < 4). The following graphs compare weighted Cantril Ladder scores for survey respondents who identified as male or female.

Cantril Ladder - Present

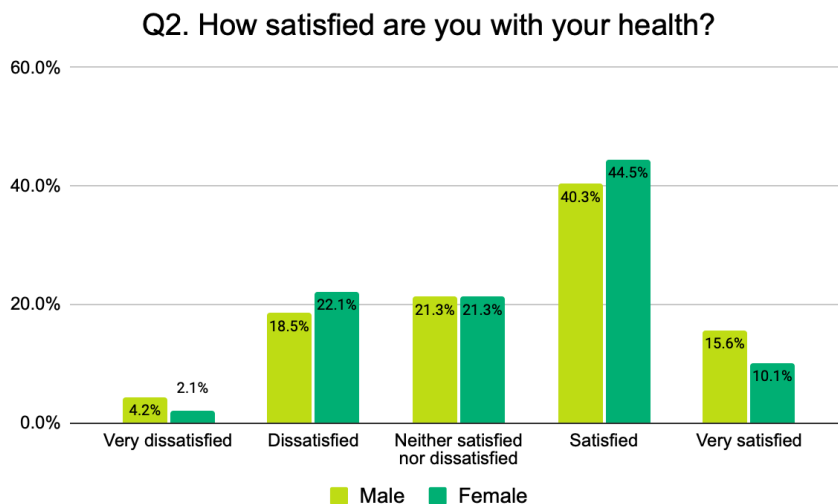
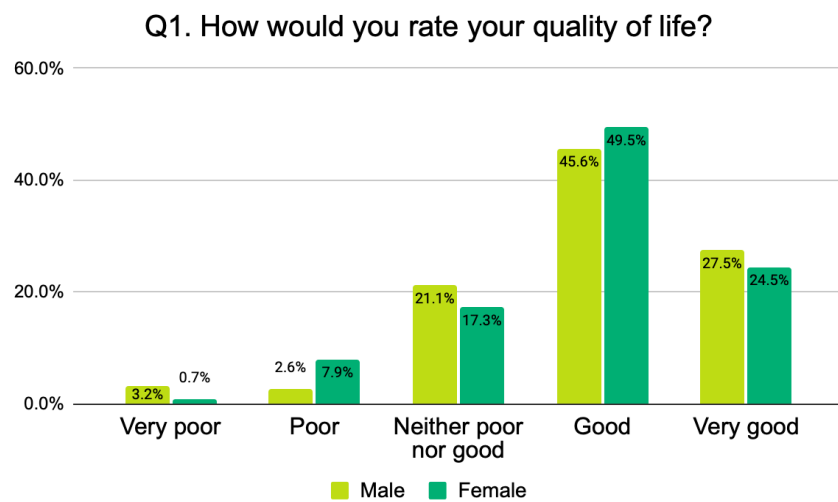


Cantril Ladder - Future



WHOQOL-BREF

The World Health Organization Quality of Life Assessment (WHOQOL-BREF) is a cross-culturally comparable quality of life (QOL) measurement that assesses quality of life within the context of an individual's culture, value systems, personal goals, standards, and concerns. The WHOQOL-BREF questionnaire contains 26 items and addresses 4 QOL domains: physical health (Q3, Q4, Q10, Q15, Q16, Q17, Q18), psychological health (Q5, Q6, Q7, Q11, Q19, Q26), social relationships (Q20, Q21, Q22) and environment (Q8, Q9, Q12, Q13, Q14, Q23, Q24, Q25). Two other items measure overall quality of life and general health (Q1, Q2). Items are rated on a 5-point Likert scale (low score of 1 to high score of 5) to determine a raw item score. The following table compares weighted WHOQOL scores for survey respondents who identified as a male or female.



Survey question	Category	Male	Female
Q3. To what extent do you feel that pain prevents you from doing what you need to do?	Not at all	0.396	0.329
	A little	0.289	0.311
	A moderated amount	0.189	0.184
	Very much	0.083	0.147
	An extreme amount	0.044	0.029
Q4. How much do you need any medical treatment to function in your daily life?	Not at all	0.495	0.367
	A little	0.212	0.270
	A moderated amount	0.184	0.220
	Very much	0.091	0.108
	An extreme amount	0.019	0.035
Q5. How much do you enjoy life?	Not at all	0.028	0.010
	A little	0.087	0.102
	A moderated amount	0.268	0.295
	Very much	0.441	0.499
	An extreme amount	0.176	0.094
Q6. To what extent do you feel your life to be meaningful?	Not at all	0.038	0.019
	A little	0.149	0.095
	A moderated amount	0.186	0.247
	Very much	0.400	0.484
	An extreme amount	0.227	0.156
Q7. How well are you able to concentrate?	Not at all	0.027	0.024
	A little	0.083	0.134
	A moderated amount	0.360	0.384
	Very much	0.369	0.372
	An extreme amount	0.161	0.086
Q8. How safe do you feel in your daily life?	Not at all	0.028	0.003
	A little	0.066	0.104
	A moderated amount	0.163	0.213
	Very much	0.467	0.463
	An extreme amount	0.276	0.217
Q9. How healthy is your physical environment?	Not at all	0.026	0.033
	A little	0.049	0.083
	A moderated amount	0.229	0.231
	Very much	0.517	0.497
	An extreme amount	0.178	0.156

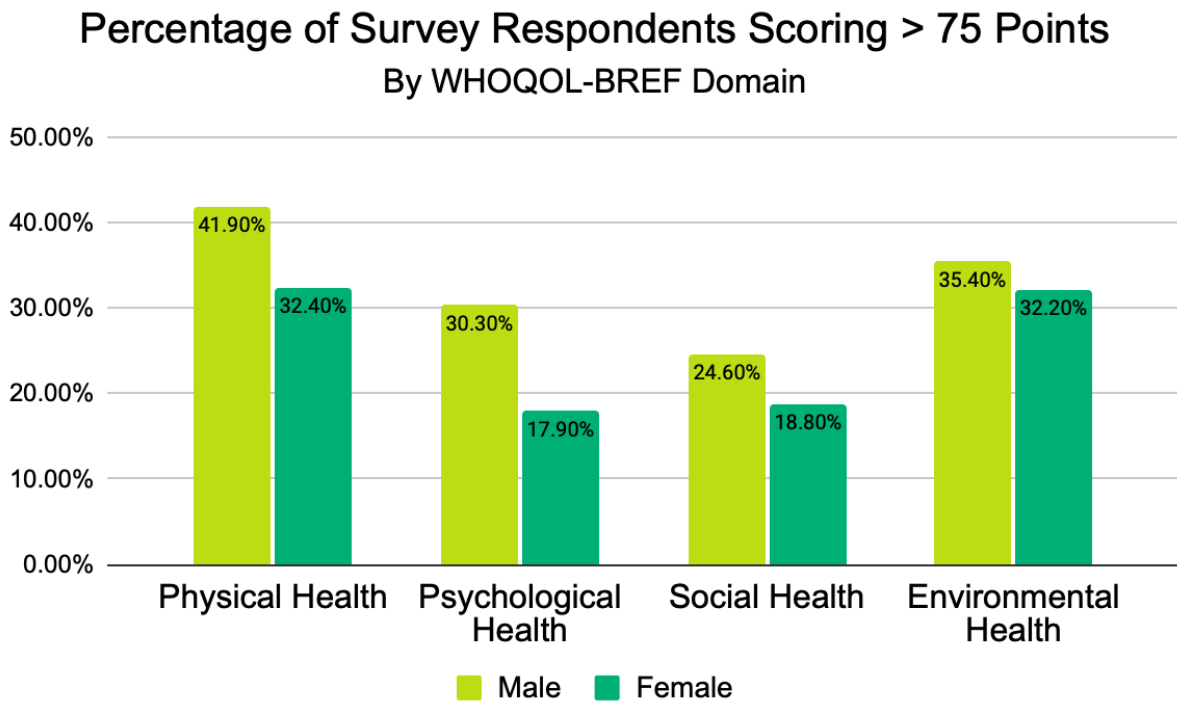
Survey question	Category	Male	Female
Q10. Do you have enough energy for everyday life?	Not at all	0.013	0.021
	A little	0.149	0.184
	Moderately	0.347	0.353
	Mostly	0.311	0.297
	Completely	0.180	0.145
Q11. Are you able to accept your bodily appearance?	Not at all	0.030	0.052
	A little	0.164	0.205
	Moderately	0.284	0.329
	Mostly	0.328	0.325
	Completely	0.194	0.089
Q12. Have you enough money to meet your needs?	Not at all	0.091	0.085
	A little	0.135	0.195
	Moderately	0.299	0.329
	Mostly	0.261	0.176
	Completely	0.214	0.215
Q13. How available to you is the information that you need in your day-to-day life?	Not at all	0.018	0.008
	A little	0.070	0.143
	Moderately	0.249	0.244
	Mostly	0.445	0.390
	Completely	0.218	0.215
Q14. To what extent do you have the opportunity for leisure activities?	Not at all	0.038	0.035
	A little	0.168	0.181
	Moderately	0.325	0.334
	Mostly	0.355	0.339
	Completely	0.114	0.111
Q15. How well are you able to physically get around?	Very poor	0.016	0.009
	Poor	0.067	0.071
	Neither poor nor good	0.123	0.167
	Good	0.301	0.331
	Very good	0.494	0.422

Survey question	Category	Male	Female
Q16. How satisfied are you with your sleep?	Very dissatisfied	0.018	0.034
	Dissatisfied	0.257	0.230
	Neither satisfied nor dissatisfied	0.239	0.255
	Satisfied	0.379	0.387
	Very satisfied	0.108	0.095
Q17. How satisfied are you with your ability to perform your daily living activities?	Very dissatisfied	0.015	0.021
	Dissatisfied	0.094	0.084
	Neither satisfied nor dissatisfied	0.189	0.256
	Satisfied	0.421	0.448
	Very satisfied	0.281	0.191
Q18. How satisfied are you with your capacity for work?	Very dissatisfied	0.040	0.015
	Dissatisfied	0.090	0.139
	Neither satisfied nor dissatisfied	0.163	0.212
	Satisfied	0.442	0.434
	Very satisfied	0.266	0.200
Q19. How satisfied are you with yourself?	Very dissatisfied	0.024	0.010
	Dissatisfied	0.130	0.150
	Neither satisfied nor dissatisfied	0.233	0.222
	Satisfied	0.400	0.484
	Very satisfied	0.213	0.134
Q20. How satisfied are you with your personal relationships?	Very dissatisfied	0.032	0.015
	Dissatisfied	0.118	0.152
	Neither satisfied nor dissatisfied	0.225	0.226
	Satisfied	0.371	0.418
	Very satisfied	0.254	0.189
Q21. How satisfied are you with your sex life?	Very dissatisfied	0.118	0.067
	Dissatisfied	0.170	0.170
	Neither satisfied nor dissatisfied	0.259	0.367
	Satisfied	0.313	0.266
	Very satisfied	0.140	0.130
Q22. How satisfied are you with the support you get from your friends?	Very dissatisfied	0.030	0.020
	Dissatisfied	0.133	0.128
	Neither satisfied nor dissatisfied	0.228	0.234
	Satisfied	0.422	0.421
	Very satisfied	0.187	0.196

Survey question	Category	Male	Female
Q23. How satisfied are you with the conditions of your living place?	Very dissatisfied	0.043	0.027
	Dissatisfied	0.086	0.105
	Neither satisfied nor dissatisfied	0.128	0.165
	Satisfied	0.433	0.395
	Very satisfied	0.309	0.308
Q24. How satisfied are you with your access to health services?	Very dissatisfied	0.043	0.033
	Dissatisfied	0.045	0.127
	Neither satisfied nor dissatisfied	0.161	0.150
	Satisfied	0.425	0.414
	Very satisfied	0.326	0.275
Q25. How satisfied are you with your transportation options?	Very dissatisfied	0.045	0.034
	Dissatisfied	0.056	0.076
	Neither satisfied nor dissatisfied	0.127	0.127
	Satisfied	0.377	0.419
	Very satisfied	0.396	0.343
Q26. How often did you have negative feelings such as blue mood, despair, anxiety, or depression?	Never	0.162	0.090
	Seldom	0.436	0.429
	Quite often	0.264	0.243
	Very often	0.097	0.190
	Always	0.041	0.047

WHOQOL-BREF Health Domains

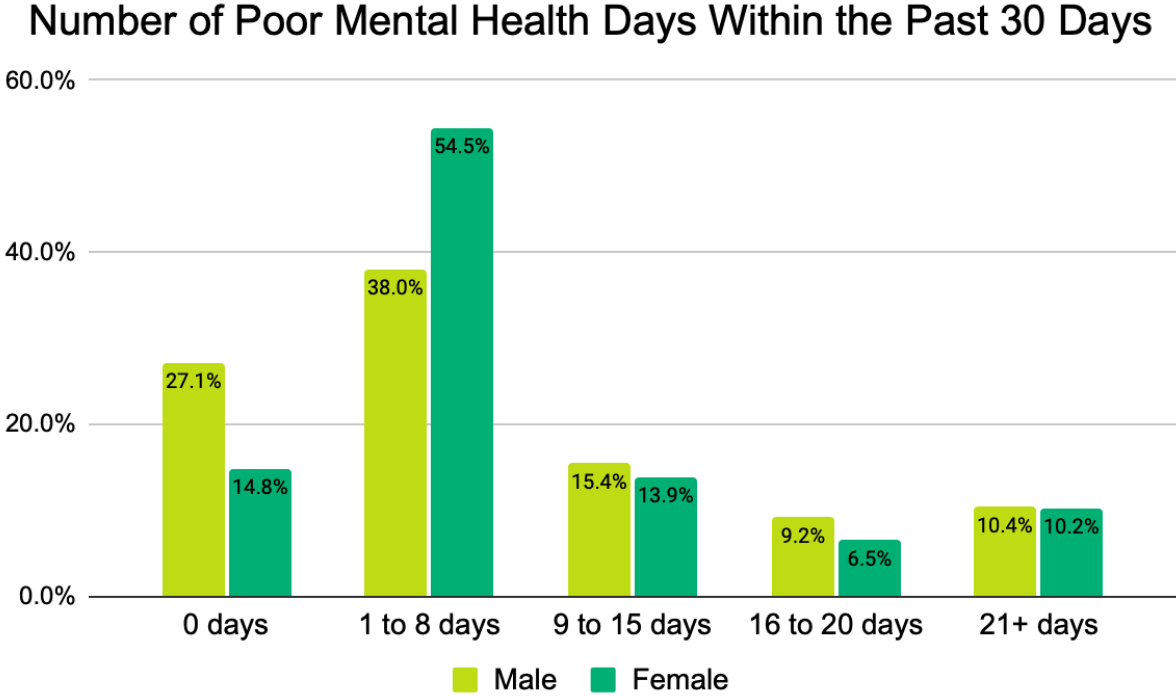
To determine domain scores, raw item scores from individual questions are summed according to domain category. Scores are then transformed to a 100-point scale. The following graph represents the percentage of each population (male or female) that scored more than 75 points for each of the four WHOQOL-BREF domains.



Domain	Transformed score	Male	Female
WHOQOL Physical Health	0 - 25 points	0.030	0.013
	26 - 50 points	0.145	0.234
	51 - 75 points	0.406	0.429
	76 - 100 points	0.419	0.324
WHOQOL Psychological Health	0 - 25 points	0.013	0.040
	26 - 50 points	0.253	0.223
	51 - 75 points	0.431	0.557
	76 - 100 points	0.303	0.179
WHOQOL Social Health	0 - 25 points	0.092	0.070
	26 - 50 points	0.252	0.253
	51 - 75 points	0.409	0.490
	76 - 100 points	0.246	0.188
WHOQOL Environmental Health	0 - 25 points	0.024	0.046
	26 - 50 points	0.169	0.192
	51 - 75 points	0.453	0.440
	76 - 100 points	0.354	0.322

Number of Poor Mental Health Days

The metric for poor mental health days was taken from the Behavioral Risk Factor Surveillance System and was determined by the answer to the question *Thinking about your mental health, which includes stress, depression and problems with emotions, for how many days in the past 30 days was your mental health not good?* The following graph compares poor mental health days for survey respondents who identified as male or female.



Wello. (2024). Community Health and Well-Being Survey: Brown County, Wisconsin, 2023 Survey Results.

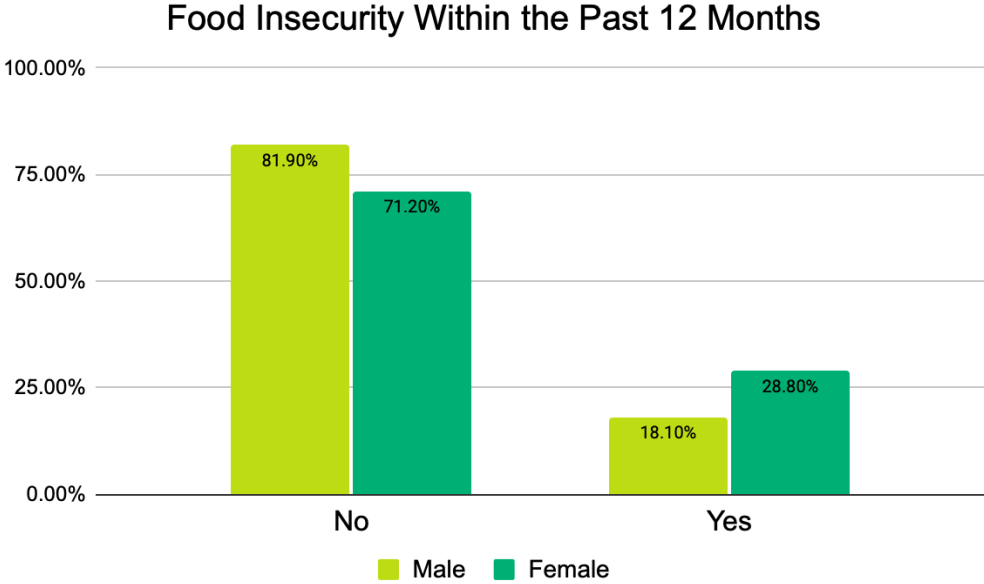
Inclusion

Utilizing a question of inclusion from the Behavioral Risk Factor Surveillance System (BRFSS) Survey Race Module, people were asked, *Within the past 30 days, have you felt emotionally upset, for example angry, sad, or frustrated, as a result of how you were treated based on your* (areas listed below). Respondents were able to choose all that applied, meaning, one could choose more than one variable (sum will be over 100%). The following table compares inclusion for survey respondents who identified as male or female.

Survey question	Category	Male	Female
Proportion of population experiencing discrimination:	based on race/ ethnicity	0.145	0.125
	based on gender	0.061	0.162
	based on gender identity	0.006	0.053
	based on sexual orientation	0.051	0.037
	based on disability status	0.102	0.058
	based on age	0.213	0.175
	based on education level	0.089	0.147
	based on income	0.235	0.230
	based on language	0.057	0.092
	None of the above	0.562	0.461

Food Insecurity - Descriptive Statistics

Food insecurity was determined from the USDA question, *In the last 12 months, did you or other people in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?*

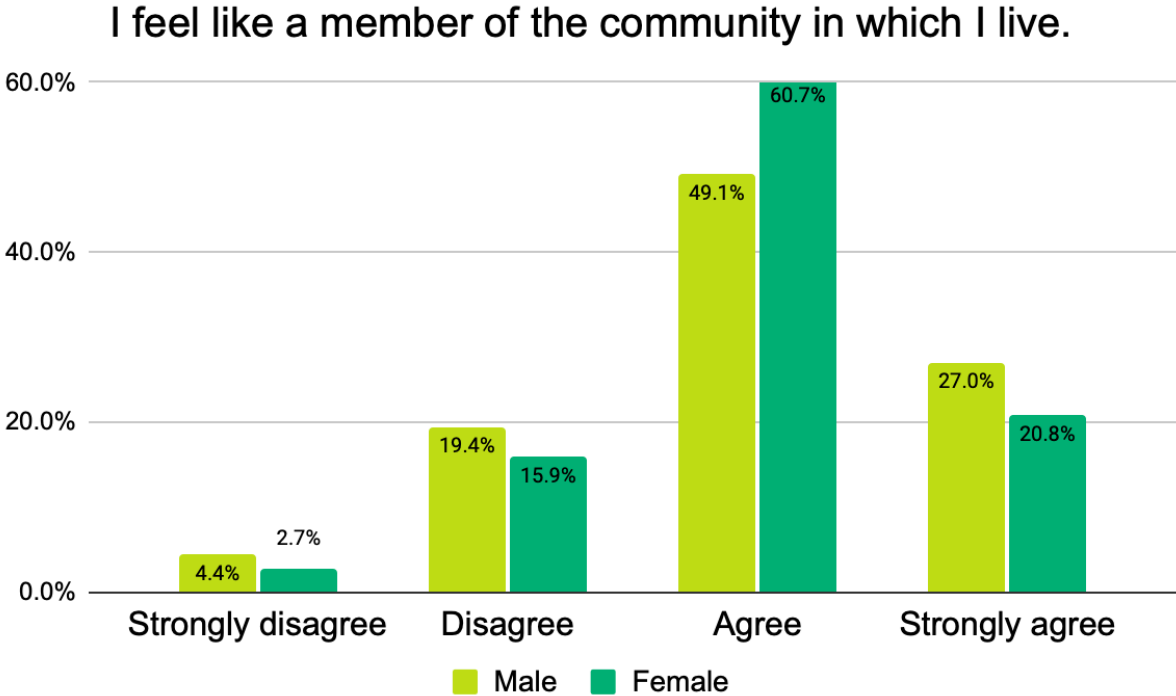


Community Questions

The 2023 Wello Health and Well-Being Survey included four community questions. Respondents were asked to think about how they feel regarding life in the community in which they live.

Membership - Descriptive Statistics

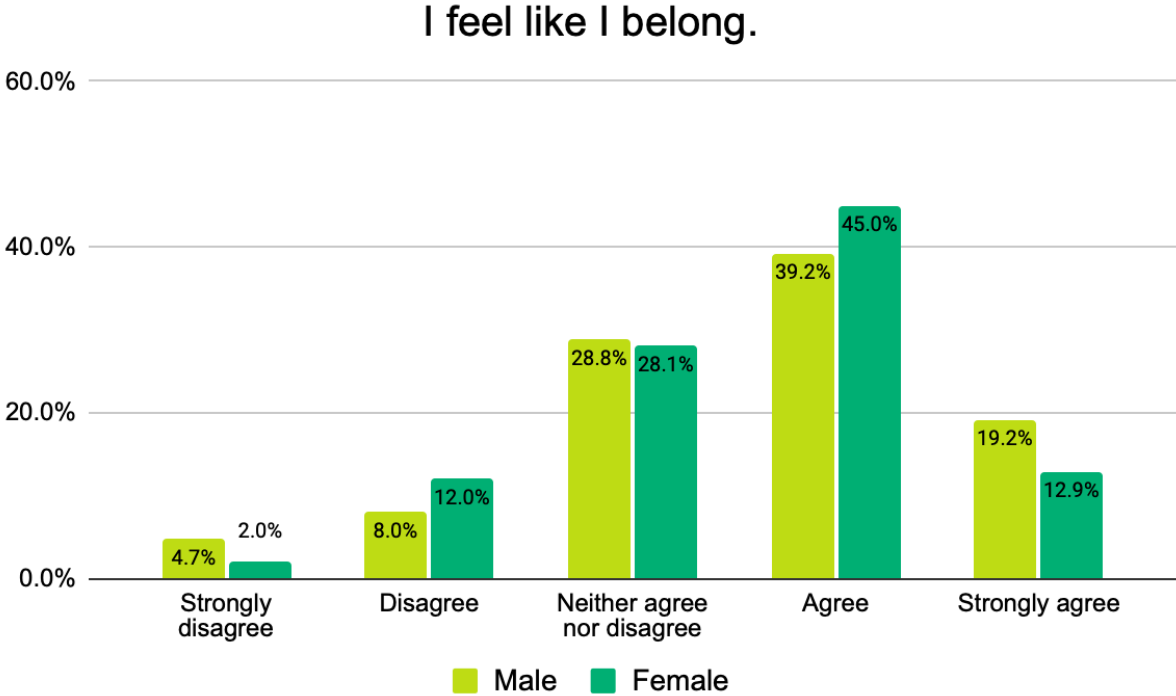
Feeling of membership was determined by asking survey participants to respond to the statement, *I see myself as a member of the community in which I live*. Response choices were *Strongly agree, Agree, Disagree, and Strongly disagree*.



Wello. (2024). Community Health and Well-Being Survey: Brown County, Wisconsin, 2023 Survey Results.

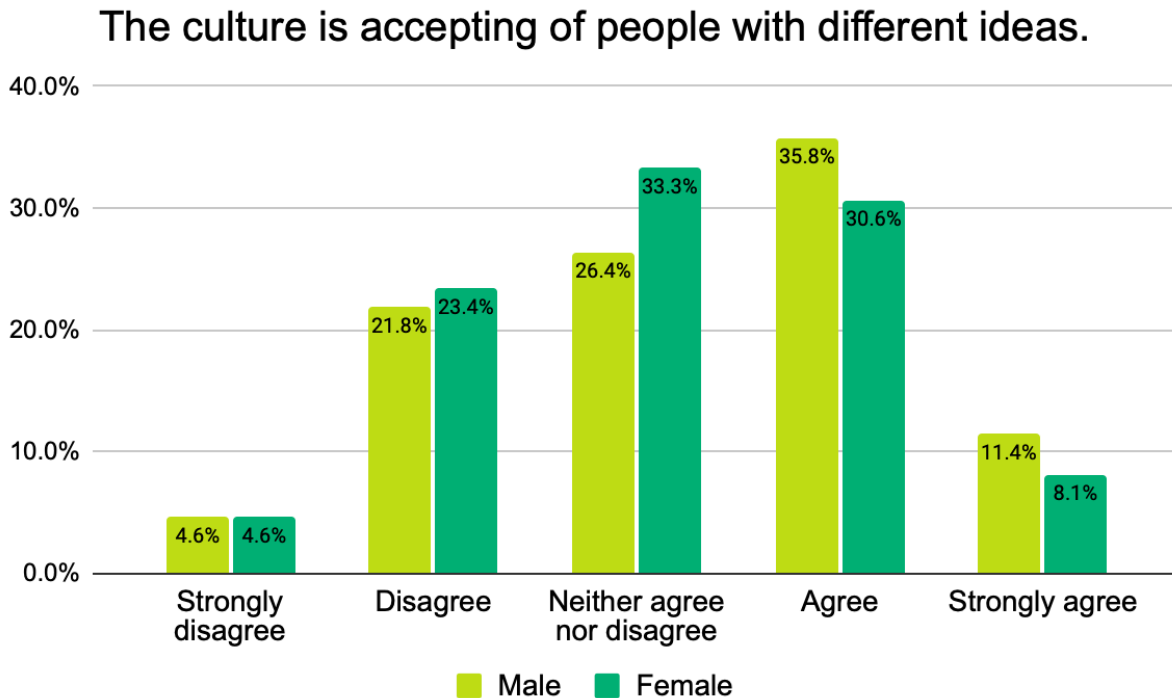
Belonging - Descriptive Statistics

Belonging was determined by asking survey participants to respond to the statement, *I feel like I belong*. Response choices were *Strongly agree*, *Agree*, *Neither agree nor disagree*, *Disagree*, and *Strongly disagree*.



Cultural Acceptance - Descriptive Statistics

Feeling of cultural acceptance was measured by asking survey participants to respond to the statement, *The culture is accepting of people with different ideas*. Response choices were *Strongly agree*, *Agree*, *Neither agree nor disagree*, *Disagree*, and *Strongly disagree*.

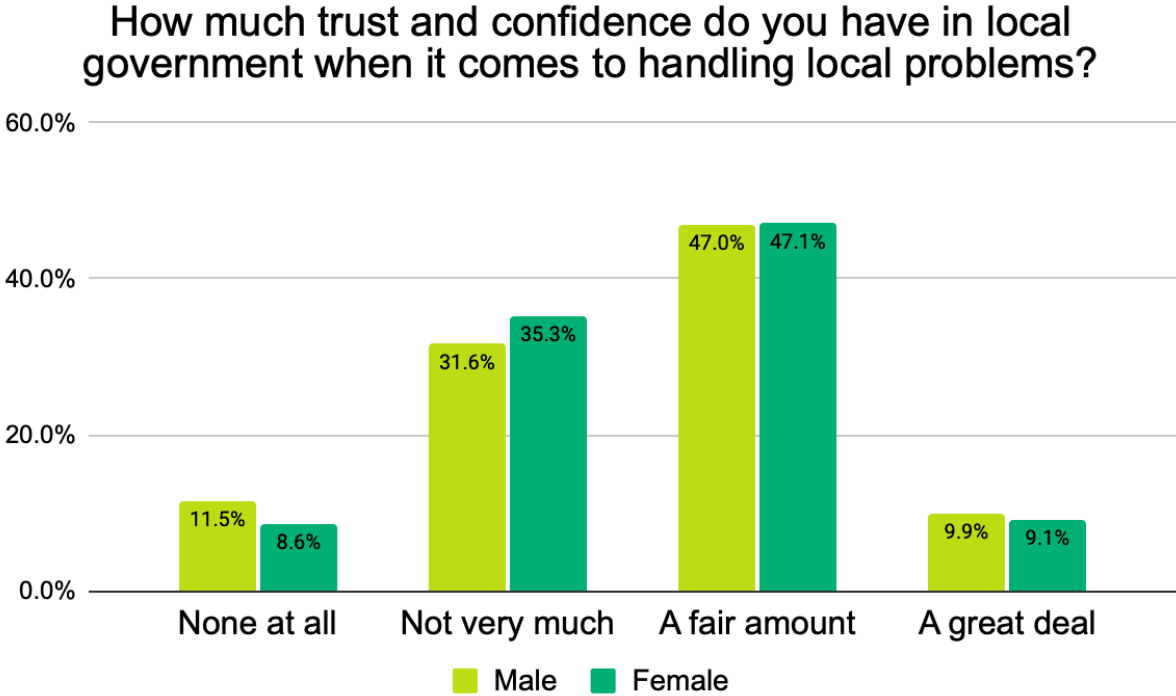


Cultural Acceptance - Logistic Regression

Responses were dichotomized into categories: agreement (*Strongly agree/ Agree*) or disagreement (*Neither agree nor disagree/ Disagree/ Strongly Disagree*). Cultural acceptance was significantly predicted by gender and LGBTQ+ status. Odds of agreeing with the cultural acceptance statement were nearly 1.5 times higher for male respondents than for female respondents.

Governmental Trust - Descriptive Statistics

Governmental trust was determined by the question *How much trust and confidence do you have in the local governments when it comes to handling local problems?* Response choices were *A great deal, A fair amount, Not very much, and None at all.*



Wello. (2024). Community Health and Well-Being Survey: Brown County, Wisconsin, 2023 Survey Results.