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Measuring Quality of Life in Our Community

Quarterly updates administering the World Health Organization Quality of Life Brief (WHOQOL-BREF)

Chicago, Illinois | April 2022



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We thank the <u>World Health Organization</u> <u>Quality of Life (WHOQOL) Working Group</u> for permitting us to use their assessment. To CASL's <u>board of directors</u>, thank you for sharing the vision of making our community seen through data-informed projects like this.

We also thank CASL program committee member Mr. Joseph Harrington, a leader in education and healthcare reform, for his thoughtful comments on this narrative. We are grateful for fellow CASL program committee members, Drs. Karen & Lee Washington, experts in interdisciplinary studies and population health, for their support and insights for initiatives like this.

Finally, none of this would be possible without CASL staff, the everyday heroes who make this project worth it. Your dedication to your clients is admirable and the support you exhibited when distributing this assessment is no exception. You are the reason projects like this are a success. Thank you.

Executive Summary

In 2020, the <u>Chinese American Service League</u> (CASL) started using the <u>World Health Organization Quality of Life-Brief</u> (WHOQOL-BREF) to better understand how our community experiences quality of life. To find out more about the instrument and why we measure quality of life, check out our first <u>report</u>. The methods established in our previous collection round were retained for the current response timeframe. You can also find other reports <u>here</u>.

Administered quarterly, CASL's Center for Social Impact (CSI) analyzed responses to mark trends, identify unmet needs, and bridge gaps in public health data. To date, we have 1,971¹ responses, a sample of the 5,500+ clients served annually. Although fairly sizeable, additional clues are needed to connect the dots from what we observe opposed to **why** participants responded the way they did.

This report contains overall and domain-specific highlights for cumulative responses gathered. Although additional research is needed to say with certainty what recommendations to make, what we have contains plenty of insight that has already been used to inform the way we accompany clients. The data we collect is simply another vehicle with which clients share their stories.

Capturing data is storytelling.

^{1.} This is the total <u>valid</u> responses but includes multiple assessments collected from a single participant.

What is Quality of Life? (QoL)

qual·i·ty of life

"...an individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns."



—(<u>The WHOQOL Group,</u> <u>Nov 1995</u>)

Overview

During the current collection round (January 31, 2022-March 4, 2022), we collected 560² valid³ responses. With a 98.5 percent response rate⁴, this was the highest participation we witnessed in any collection round. Nearly half (48.4 percent) of participants reported living in Armour Square, followed by Bridgeport, Near South Side, Brighton Park, and McKinley park. This was fairly consistent across all collection rounds but it does not capture all the places in the Chicagoland area where our clients live.

In total, there were 1,971 responses across all four collection rounds. Most questionnaires were administered in Chinese-Simplified based on anecdotal evidence captured during data entry. The average score⁵ per collection dropped just over three points from 58.8 to 55.6 (out of 100). While a score by itself tells us something, it only tells us part of the story. Despite not having a standard of what makes a 'good' or 'bad' quality of life, the variations we saw among individuals with multiple responses gave us a glimpse into what their stories involved. Continue reading to find out what updates we saw from a cumulative perspective.

^{2.} Six of these responses were because a client took the assessment twice during the collection period (second assessment in the collection period).

Valid responses have a completion rate of 88% or higher as indicated in the WHOQOL-BREF scoring procedures. 3

How many people chose to answer a question or set of questions.
 Scores for overall quality of life and domain-specific values are calculated out of 100. Higher number is better.

Across all collection rounds

SAMPLE CHARACTERISTICS

Age Distribution by Collection Round

QoL Participant Age Distribution by Collection



Although the age distribution across all collection rounds appeared relatively consistent, participants from the fourth collection round were significantly older than that of participants from the second collection round. Keeping in mind that some of the participants have multiple entries, each collection round lasted approximately a month and only the last three were conducted quarterly. In sum, the age distribution shown could be due to a variety factors (i.e. service frequency, new clients).

Gender Distribution by Collection Round



Compared to the second collection round, there were significantly more female-identifying participants this time around. Although the gender disparities are exaggerated in this and previous samples, the fact that most participants identified as female warrants further research into how gender factors in to responding (in part or in whole).

Educational Attainment by Collection Round



Variation in education levels across all collection rounds were similar. When looking at how demographic variables play into overall quality of life scores, we noticed several new correlations once thought insignificant. Keep in mind that none of these variables—age, gender, or educational attainment—are what triggered the response itself. In the next section, we go over what predictive variables say about trends in QoL scores.

^{6.} Tertiary education, otherwise known in the U.S. as 'postsecondary' and/or 'higher education,' is considered an internationally-recognized definition according to the <u>National Center for Education Statistics</u>.

Across all collection rounds

OVERALL SCORES & PREDICTIVE VARIABLES

Predictive Variables⁷ of **Domain Scores**

Over the last four collection rounds, we observed that...

...age was negatively correlated⁸ across all four domains; and that

... higher levels of educational attainment were **positively** correlated⁹ with most domains.

Across cumulative responses, there was a 1.3 point drop¹⁰ in overall quality of life when comparing the first collection round to the current collection round

The table on the following page indicates what sample characteristics were correlated per domain. Predictive variables are shown in the middle column and the direction of the relationship is depicted by a (+) or (-) following the specific characteristic. New relationships among variables are highlighted.

These correlations cover the cumulative total responses and have been weighted accordingly. Please note that as our sample increases, these relationships may change.

Predictor variable is the name given to an independent variable used in regression analyses. The predictor variable provides information on an associated dependent variable regarding a particular outcome (Salkind, N, 2010) Negative correlation: a relationship between two variables in which the value of one variable increases as the value of the other decreases (e.g. working more and having less free time). Positive correlation: a relationship between two variables in which both rise and fall together (e.g. studying and test

⁸

performance)

^{10.} At 91% confidence interval—higher percentage indicates stronger correlation

| Domain | Sample Characteristics | Which Characteristics were Correlated with Each Domain? (+) positively correlated • (-) negatively correlated NEW! this quarter | | | | | |
|-------------------------|---|---|---|--|--|--|--|
| | Education Level None, Primary, Secondary, Tertiary | Tertiary (+) Secondary (+) (when compared with no education) | | | | | |
| Physical | Marital Status Single, Married, Divorced, Widowed | arital Status gle, Married, Divorced, Widowed (when compared with being single) | | | | | |
| | Currently ill? | • ill (-) • <mark>NEW! blank (-)</mark> (when answering " yes" | ') | | | | |
| Psychological | Education Level None, Primary, Secondary, Tertiary• Tertiary (+) • NEW! Primary (-) (when compared with no educed) | | | | | | |
| | Marital Status Single, Married, Divorced, Widowed | Married (+) Separated (-) Living as Married (-) (when compared with being single) | | | | | |
| | Currently ill? | • ill (-) • <mark>NEW! blank (-)</mark> (when answering <i>"</i> yes" | ill (-) NEW! blank (-) (when answering "yes") | | | | |
| | Education Level None, Primary, Secondary, Tertiary | N/A | | | | | |
| Social Relationships | Marital Status Single, Married, Divorced, Widowed | Married(+) NEW! blank (+) (when compared with being single) | | | | | |
| | Currently ill? | ill (-) (when answering "yes") | | | | | |
| Environmental | Education Level None, Primary, Secondary, Tertiary | Tertiary (+) NEW! Secondary (+) (when compared with no education) | | | | | |
| | Marital Status Single, Married, Divorced, Widowed | Divorced (-) (when compared with being single) | | | | | |
| | Currently ill? Yes/No | ill (-) (when answering "yes") | | | | | |

Average Scores (All Domains) Across All Collection Rounds



When looking at the average scores out of 100, we saw a decline from the first time we surveyed clients. Considering that several participants were the same for certain collection rounds, scores may reflect regular aging effects (e.g. physical limitations manifest with increasing age). The next section offers a closer look at each domain and how participants responded based on age, education level, marital status, and feeling ill at the time of taking the assessment.

Across all collection rounds

DOMAIN SCORES

Then & Now

This section explores each domain from the predictive variables table mentioned earlier. Keep in mind that the following figures represent the cumulative number of participants (n=1,971) not just those from the current collection round. The results are presented in aggregate because looking at a single collection round's data offers limited insight. What matters is how the total sample changed (or stayed the same) over time.

Each domain contains a brief description, along with the specific assessment questions the domain consists of. Key takeaways are denoted by a(n) green or red asterisk(s) (*). An upward green arrow ▲ signifies a positive correlation and a downward red arrow ▼ demonstrates a negative correlation between score and characteristic (e.g. age, gender, education, etc.). The direction of the relationship(s) is/are followed by the degree¹¹ to which the finding is not random.



11. Confidence interval—higher percentage indicates stronger correlation

Physical



Domain description: Activities of daily living; dependence on medicinal substances and medical aids; energy and fatigue; mobility; pain and discomfort; sleep and rest; work capacity



Questions¹² included in this domain:

- 3. To what extent do you feel that physical pain prevents you from doing what you need to do?
- 4. How much do you need any medical treatment to function in your daily life?
- 10. Do you have enough energy for everyday life?
- 15. How well are you able to get around?
- 16. How satisfied are you with your sleep?
- 17. How satisfied are you with your ability to perform your daily living activities?
- 18. How satisfied are you with your capacity for work?

^{12.} These questions appear as they are found in the original WHOQOL-BREF instrument. Some of these questions (in English or Chinese) can be quite vague and may have an impact on how participants responded, but this relationship warrants further investigation.

Physical

| Domain score average out of 100 (higher is better) | Domain score by age | | Domain score by education | | Domain score by marital status | | Domain score by current illness (felt "ill" at time of assessment) | |
|--|------------------------|----|---------------------------------|------|-----------------------------------|----|--|-------|
| | Age*: Score | e | | | | | | |
| | 18-29: | 76 | None: | 46 | Single: | 60 | Feeling ill*: | 44 |
| | 30-44: | 72 | Primary: | 51 | Married*: | 61 | Not feeling il | l: 60 |
| 57 | 45-64: | 63 | Secondary [®] | *:60 | Living as married: | 54 | | |
| 57 | 65-84: | 53 | Tertiary*: | 64 | Separated: | 52 | | |
| | 85+: | 47 | | | Divorced: | 58 | | |
| | | | | | Widowed: | 48 | | |
| | | | | | | | | |

- * Age ▼ 0.33 points per year at 99.9% CI
- * Tertiary education ▲ 5.73 points vs. no education at 99.9% CI
- * Secondary education **A** 2.64 points vs. no education at 99.9% CI
- * Married 12.69 points vs. single at 99.9% CI
- * Marital (blank) \$3.43 points vs. single at 91.4% CI
- * Feeling ill ▼ 11.50 points vs. not feeling ill at 99.9% CI
- * ill status (blank) ▼ 3.32 points vs. not feeling ill at 99.9% CI

Psychological



Domain description: Bodily image and appearance; negative feelings; positive feelings; self-esteem; spirituality / religion / personal beliefs; thinking, learning, memory and concentration



Questions included in this domain:

- 5. How much do you enjoy life?
- 6. To what extent do you feel your life to be meaningful?
- 7. How well are you able to concentrate?
- 11. Are you able to accept your bodily appearance?
- 19. How satisfied are you with yourself?
- 26. How often do you have negative feelings such as blue mood, despair, anxiety, depression?

Psychological

| Domain score average out of 100 (higher is better) | Domain score by age | | Domain score by education | | Domain score by marital status | | Domain score by current illness (felt "ill" at time of assessment) | |
|---|------------------------|----|---------------------------------|-----------|-----------------------------------|----|--|----|
| | Age*: Score | 9 | | | | | | |
| | 18-29: | 71 | None: | 53 | Single: | 60 | Feeling ill*: | 49 |
| | 30-44: | 69 | Primary*: | 56 | Married*: | 62 | Not feeling ill: | 62 |
| 56 | 45-64: | 63 | Secondary: | 61 | Living as married*: | 52 | | |
| 00 | 65-84: | 57 | Tertiary*: | 66 | Separated*: | 52 | | |
| | 85+: | 54 | | | Divorced: | 59 | | |
| | | | | | Widowed: | 55 | | |
| | | | | | | | | |

- * Age ▼ 0.21 points per year at 99.9% CI
- * Tertiary education ▲ 4.98 points vs. no education at 99.9% CI
- * Primary education ▼ 1.47 points vs. no education at 91.9% CI
- * Married ▲ 2.63 points vs. single at 99.9% CI
- * Living as married ▼ 5.04 points vs. single at 96.7% CI
- * Separated ▼ 4.16 points vs. single at 90.9% CI
- * Feeling ill ▼ 9.98 points vs. not feeling ill at 99.9% CI
- * ill (blank) ▼ 2.75 points vs. not feeling ill at 92.3% CI

Social Relationships



Domain description: Personal relationships; social support; sexual activity



Questions included in this domain:

- 20. How satisfied are you with your personal relationships?
- 21. How satisfied are you with your sex life?
- 22. How satisfied are you with the support you get from your friends?

Social Relationships

| | | | | | | | J | |
|--|---------------------------|----|---------------------------------|----|-----------------------------------|-----------|--|----|
| Domain score average out of 100 (higher is better) | Domain score by age | | Domain score by education | | Domain score by marital status | | Domain score by current illness (felt "ill" at time of assessment) | |
| | Age*: Score | è | | | | | | |
| | 18-29: | 72 | None: | 49 | Single: | 56 | Feeling ill*: | 44 |
| | 30-44: | 69 | Primary: | 52 | Married*: | 59 | Not feeling ill: | 58 |
| 60 | 45-64: | 62 | Secondary: | 58 | Living as married: | 53 | | |
| 00 | 65-84: | 52 | Tertiary: | 59 | Separated: | 52 | | |
| | 85+: | 46 | | | Divorced*: | 54 | | |
| | | | | | Widowed: | 46 | | |
| | | | | | | | | |

- * Age ▼ 0.33 points per year at 99.9% CI
- * Married ▲ 5.0 points vs. single at 99.9% CI
- * Marital (blank) ▲ 5.64 points vs. single at 97.5% CI
- * Feeling ill ▼ 8.0 points vs. not feeling ill at 99.9% CI

Environment



Domain description: Financial resources; freedom, physical safety and security; health and social care: accessibility and quality; home environment; opportunities for acquiring new information and skills; participation in and opportunities for recreation / leisure activities; physical environment (pollution / noise / traffic / climate); transport



Questions included in this domain:

- 8. How safe do you feel in your daily life?
- 9. How healthy is your physical environment?
- 12. Have you enough money to meet your needs?
- 13. How available to you is the information that you need in your day-to-day life?
- 14. To what extent do you have the opportunity for leisure activities?
- 23. How satisfied are you with the conditions of your living place?
- 24. How satisfied are you with your access to health services?
- 25. How satisfied are you with your transport?

Environment

| | | | | | | | J | |
|--|------------------------|----|---------------------------------|--------------|-----------------------------------|----|--|----|
| Domain score average out of 100 (higher is better) | Domain score by age | | Domain score by education | | Domain score by marital status | | Domain score by current illness (felt "ill" at time of assessment) | |
| | Age*: Score | Э | | | | | | |
| | 18-29: | 73 | None: | 54 | Single: | 59 | Feeling ill*: | 51 |
| | 30-44: | 65 | Primary: | 56 | Married: | 60 | Not feeling ill: | 60 |
| 59 | 45-64: | 59 | Secondary [*] | *:5 9 | Living as married: | 57 | | |
| 57 | 65-84: | 57 | Tertiary*: | 64 | Separated: | 57 | | |
| | 85+: | 55 | | | Divorced*: | 54 | | |
| | | | | | Widowed: | 56 | | |
| | | | | | | | | |

- * Age ▼ 0.21 points per year at 99.9% CI
- * Tertiary education ▲ 6.19 points vs. no education at 99.9% CI
- * Secondary education 1.43 points vs. no education at 91.3% CI
- * Divorced ▼ 6.37 points vs. single at 99.9% CI
- * Feeling ill ▼ 6.59 points vs. not feeling ill at 99.9% CI

Across all collection rounds

PARTICIPANTS WITH MORE THAN ONE RESPONSE

Repeat participants

Since quality of life is subject to change (based on any number of factors), we ask clients to retake the assessment in an attempt to establish an individual baseline. What this tells us is that quality of life is dynamic, both at the collective and individual level(s). Now that we have wrapped up four response collection rounds, some participants responded at different times.

Looking at who participated this time around, we had 98 individuals who also participated during the first collection period; 90 individuals participated in the current round and the second collection period; and 166 individuals took part during collection rounds three and four (current). Due to how program service models are set up, some clients show up more frequently than others (e.g. in home care requires seeing the client more often than someone applying for public benefits).

Although we saw quality of life scores decrease over time, it had little to do with the timing of data collection and more to do with the same participants aging. As participants grow older, we suspect that they will respond and perceive their quality of life differently. This is apparent in the negative correlation between [quality of life] scores and age, but only for collection rounds one and four. Only time will tell *how* advanced age plays a part into changing views on quality of life.

Possible causes for lower QoL scores

It is imperative to remember that "better" or "worse" quality of life is relative, all things considered (i.e. people may have similar experiences externally but perceive them as wholly different). While the exact cause for the decrease in quality of life scores from collection rounds one and four remains a mystery, we can make note of *what* the differences were.

Scores in the social relationship domain dropped 5 points between collections one (55) and four (50) for male-identifying participants. Check out the dashboard of average domain scores by gender for collections one and four on the next page.

This does not mean that gender itself plays into why the scores were lower, but it does signify that there is something there and that we need more input from male-identifying participants. Then we can start planning around the sort of activities and interventions that would promote connectedness in a more targeted way.



Male Respondent QoL Average Scores



While this chart does not say "why" this drop happened or what caused it, we need to remember that in both samples, there were fewer male-identifying participants overall. Collection one had 117 male-identifying participants (31.6 percent of 370 total participants). By comparison, collection four had 165 maleidentifying participants, making up 29.7 percent of 554 total participants. Further investigation is needed to determine whether or not this trend continues.

CONCLUSION

What's next

"In God we trust, all others bring data... ...without data, you're just another person with an opinion."

-W. Edwards Deming

Data is a frequently-used term these days. We collect data every day, sometimes without even noticing it. The difference in projects like measuring quality of life or social drivers of health is the emphasis on *how* that data is collected. Whether we use a survey, an interview, or a focus group to gather this information, this data helps us shape programs and policies that are clientdriven.

When we implement initiatives like our Behavioral Health & Clinical Services (BHCS) program, that was a result of what our clients shared with us. Now, it does not mean that quality of life questionnaires are the only way to gather data, but it is a way for us to be on the same page in terms of what clients are saying.

In the future, we anticipate that the data we collect from the quality of life questionnaires will help inform the way we come up with targeted solutions to complex problems.

Capturing data *is* storytelling...

...what's your story?



Thank you



Questions?

Share your thoughts at csi@caslservice.org