

Scioto Analysis

Economics | Public Policy

Subjective Wellbeing

May 2024

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1 Executive Summary

The “Subjective Well-Being in Ohio Survey Study” aimed to collect and analyze representative data from all 88 counties in Ohio regarding self-reported well-being. Subjective well-being, as defined by the Panel on Measuring Subjective Well-being in a Policy-Relevant Framework, refers to “how people experience and evaluate their lives and specific domains and activities in their lives” (Stone, A. A. et al., 2013). The field of subjective well-being and happiness has been under-researched, with limited understanding of its nuances or the relationship to external factors and policy and decision-making (Das, K.V. et al., 2020). The primary objective of this project was to identify potential trends and relationships within the collected data regarding subjective well-being to better inform future policy and decision-making in Ohio.

Four main research objectives were identified for the completion of this project:

1. Create the Survey
2. Determine Sample Populations
3. Distribute Survey
4. Analyze Survey Data

The survey was modeled after the US Happiness Report and was deployed on February 5th, 2022 (Gross National Happiness USA, 2022). Data collected for this project was downloaded on March 20th, yielding 667 responses from 71 out of 88 counties in Ohio. Analysis of the free-response question “What makes you happy?” revealed recurring themes through keywords, with Relationships and Social Connections being the most prevalent (appearing 318 times), followed by Health & Well-being (214 times) and Creativity and Hobbies (135 times). Trends in the data revealed a positive relationship between age and happiness, echoing findings from the US 1 Happiness Report, in contrast to the long-established “U-shaped curve” relationship between age and happiness. Furthermore, survey data indicated a positive correlation between happiness and how worthwhile respondents believed their life activities to be, with happier respondents reporting their life activities were more worthwhile. There was a negative relationship between anxiety and happiness, with more anxious respondents reporting lower levels of happiness on average.

This study represents the first attempt at a statewide subjective well-being survey in Ohio, and has revealed many avenues for future study. Ideally, subsequent studies should secure grant funding to support a random sampling methodology, ensuring a representative and unbiased sample. Insights gained from a more refined study will offer valuable guidance for policymaking in Ohio. Ultimately, conclusions drawn from this data could foster an improved understanding of happiness in Ohio and its various determinants, including age, gender, race, and ethnicity. In the future, this data could be used for thoughtful policy creation that can more effectively improve the quality of life for Ohio's residents.

2 Introduction

This study centers on a statewide survey of well-being in Ohio marking the final phase of a multi-year research project focused on understanding well-being in Ohio. Scioto Analysis' project's initial phase involved an in-depth study of Ohio's Genuine Progress Indicator, a holistic measure extending beyond GDP to evaluate economic progress (Scioto Analysis, 2023a). Subsequent phases examined poverty and inequality in Ohio, resulting in the creation of the Ohio Poverty Measure and the publication of an inequality report (Nagarathinam et al., 2021). Following the Subjective Well-being in Ohio Survey Study was a human development report led by a group of Ohio State University students in December 2023 (Scioto Analysis, 2023b). The data collected and conclusions drawn from this statewide well-being study aim to build on these previous reports.

The goals of this study were the development of a survey instrument for analyzing subjective well-being, identification of survey populations, survey dissemination, and data analysis. The quantitative, qualitative, and demographic questions within the survey were based on those utilized in the U.S. Happiness Report conducted by Gross National Happiness USA (Gross National Happiness USA, 2022). Modifications were made to the demographic questions from the U.S Happiness Report by adding multiracial options and varied gender options, and the finalized survey was constructed using the platform "Qualtrics." The sample population was determined by the individuals who had access to community hubs and online platforms where the survey was promoted. An adequate response rate from each county was prioritized. During the process of conducting research, Ohio State University professors and online resources were utilized as sources of information. Once this process was completed, wider survey distribution across the state was accomplished by contacting various community

hubs and groups. After the completion of the survey, data analysis was done to identify potential correlations of how different demographics were self-reporting their happiness and anxiety levels.

A positive correlation was found between reported happiness and worthwhileness, while a negative correlation was found between reported anxiety and happiness levels. Additionally, an association between age and reported happiness was observed, with reported happiness tending to increase with age. Key themes contributing to happiness were identified, which include family and relationships, health, creativity, etc.

Despite the various insights gained from the data, there exists room for refinement in the survey methodology. Developing a more robust survey with improved surveying methodology can yield a more representative dataset, thereby providing higher-quality information to policymakers needed to develop a better understanding of their community.

3 Methods

This study employed a statewide survey to gather comprehensive data on subjective well-being within Ohio.

Survey Design Rationale

Scioto Analysis sought to have this study directly comparable to the US Happiness Report, so it was necessary to utilize similar questions to the earlier study.

Qualitative Questions

In addition to the quantitative questions, the survey featured six qualitative questions aimed at collecting demographic information from participants. These questions covered respondents' county of residence, age, gender, race, and ethnicity (See Appendix A).

Quantitative Questions

The quantitative segment of the survey consisted of four questions. The questions were directly adapted from the survey that was utilized in the US National Happiness Report, which was conducted by Gross National Happiness USA. The questions were designed to measure subjective well-being and were assessed on a scale from 0 to 10, with response options ranging from "Not at all" to "Completely." The questions asked were as follows:

- How satisfied are you with your life?
- To what extent do you feel the things you do in your life are worthwhile?
- How happy did you feel yesterday?
- How anxious did you feel yesterday?

The questions were selected based on their simplicity and alignment with the objectives of the study, which aimed to measure subjective well-being across a diverse demographic population within Ohio. While these questions may not capture all aspects of well-being comprehensively, they were deemed suitable for a statewide survey to ensure ease of understanding and consistency of responses across participants.

Free Response Questions

A pivotal component of the survey design was the inclusion of the free-response question "What makes you happy?" Participants were provided with the opportunity to elaborate on aspects of their lives that contribute to their happiness, allowing for a deeper understanding of subjective well-being. Responses to the free-response question were analyzed to identify major themes related to happiness and well-being. Keywords and phrases were extracted from the responses, and thematic analysis techniques were employed to categorize these themes.

Survey Distribution

Due to limited funding and logistical constraints, a random sampling technique was not used for survey distribution. Initial plans to utilize the Ohio State University's

Extension Office for outreach were impeded by the lack of involvement from the Institutional Review Board (IRB), preventing the Extension Office's support for the project.

In response to this lack of support, alternative distribution strategies were implemented. An email campaign was launched to contact every public library in the state of Ohio. Flyers containing a QR code linked to the survey, powered by Qualtrics, were disseminated to library patrons and staff. This approach aimed to leverage the accessibility and community presence of public libraries to reach a diverse demographic of participants.

Along with this, the method of distributing the survey through email was utilized for other community hubs. All public universities in Ohio were contacted. University libraries, student unions, and newspapers were contacted. Although many university community hubs were contacted, the responses were varied. Many failed to respond and some contacts required a fee for advertising. The emails contained the flyer, which included information on the survey and the QR code.

Furthermore, outreach efforts extended to various organizations and entities, including county commissioners, universities, community colleges, libraries, and churches across the state of Ohio. When reaching out to these organizations, a flyer was sent via email. The flyer contained a brief overview of the study and survey and a QR code to access the survey. The flyer that was sent can be found in Appendix C. In the later stages of the project, social media platforms like Facebook and Reddit were used to disseminate the survey and to ask community members to further share the survey with their social networks.

4 Results

Based on the data collected, correlations can be made regarding the various quantitative and qualitative responses. The survey garnered 667 responses from 71 counties in Ohio. The correlations provide insight on well-being throughout Ohio.

Age Range	10-20	21-30	31-40	41-50	51-60	61-70	71-80
Female							
American Indian or Alaska Native		4					
Asian	2	5	1	2			
Black or African American	7	9	3		1	1	1
Multiracial	1	9	2	1	1	1	
White	41	116	67	62	57	50	4
Male							
American Indian or Alaska Native		1					
Asian	2	5					
Black or African American	1	1			1	1	
Multiracial	2			1			1
Native Hawaiian or Other Pacific Islander			1				
White	12	66	34	28	15	8	9
Non-binary							
Asian		1					
Black or African American	3	1					
White	3	3	2	3		1	
Other							
White			1				
Prefer not to say							
White	3	6	2			1	
Total	77	227	113	97	75	63	15
Number of Total Responses							667

Figure 1: Survey Demographics

Demographics

The age distribution of respondents was varied, with two peaks in the 21-30 and 31-40 age brackets respectively comprising 227 and 113 respondents. Notably, there was also a significant representation of younger participants as a whole, with 77 respondents falling within the 10-20 age range. Gender distribution reveals a higher participation of female respondents, who comprised 448 of the total responses, compared to male respondents, who provided 189 of the survey responses. This gender imbalance may influence the interpretation of survey findings, as it indicates a potential disparity in engagement or interest across gender lines.

White respondents comprised the largest ethnic group across both genders, totaling 593 individual respondents. This is followed by Black or African American respondents (30), Asian respondents (18), and Multiracial respondents (19).

Geographic Distribution of Happiness

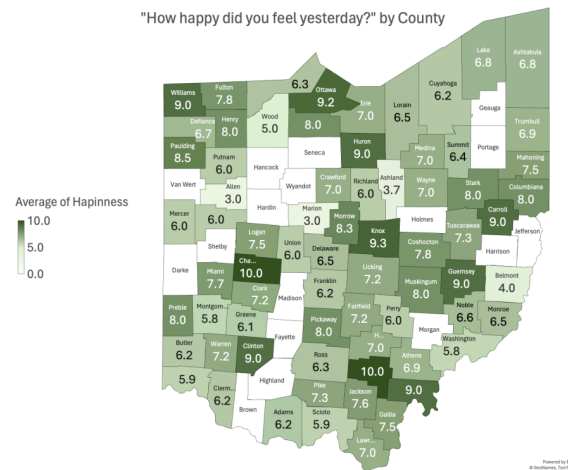


Figure 2: Map of Ohio counties depicting the average happiness levels. Counties with white shading received no representative sampling.

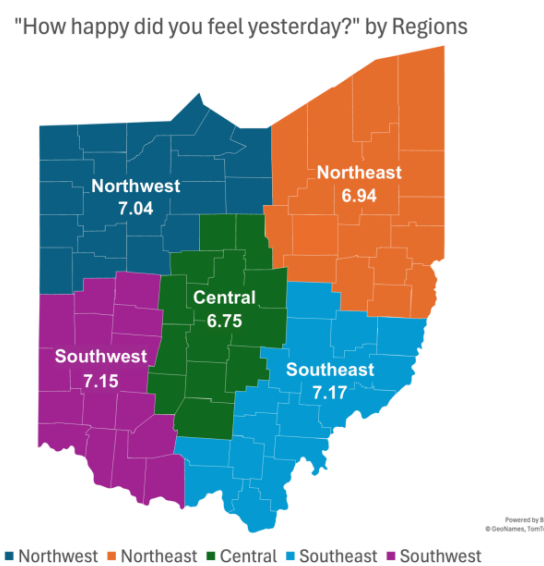


Figure 3: Average happiness levels among residents in regions across the state

Some counties had substantially fewer responses, which led to disproportionately high average happiness levels. Due to this, we grouped counties into five larger regions. This segmentation strategy aims to minimize the impact of singular high responses within individual counties, ensuring a more accurate assessment of happiness levels

statewide. Yet, it also leads to a more generalized understanding of well-being that is not as representative of each county. Based on the data collected, this regional approach facilitates a better understanding and comparison of happiness trends within and between different geographical areas of Ohio.

Reported Qualitative Sources of Happiness

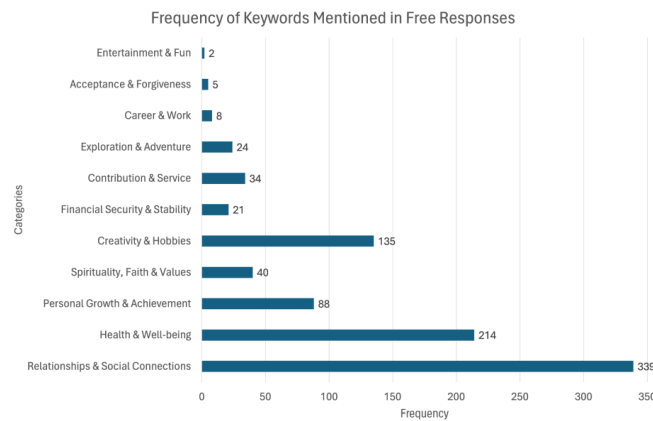


Figure 4: Definitions of happiness

A significant amount of the responses fell into the categories of Relationships & Social Connections, Health & Well-being, and Personal Growth & Achievement. These findings underscore the importance of interpersonal bonds, physical and mental health, and personal development in fostering happiness. Additionally, Spiritual & Faith-based values emerged as significant contributors to individuals’ sense of fulfillment, suggesting the importance of spiritual practices and belief systems in promoting well-being. Creativity & Hobbies were also identified as key sources of joy, highlighting the role of leisure activities and creative expression in enhancing life satisfaction.

The figure above illustrates the frequency of keywords identified in responses to the survey question, "What makes you happy?" The analysis is focused on respondents who scored 7 or higher in Questions 6, 7, and 8. Each keyword represents a significant aspect contributing to the happiness of individuals within this subset. Among the highlighted keywords, Relationships & Social Connections emerge as the most frequently mentioned source of happiness, with a count of 284 mentions. This underscores the impact that interpersonal relationships and social interactions have on individuals’ well-being. Following closely, Exploration & Adventure, Personal Growth & Achievement,

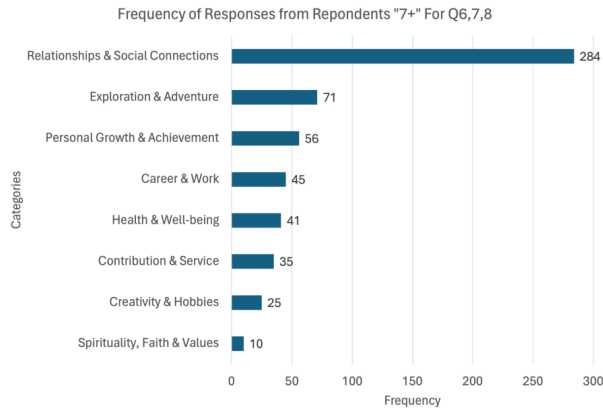


Figure 5: Definition of happiness for happy respondents

and Relationship & Social Connections also garnered substantial mentions, with counts of 71, 56, and 45 respectively. These findings suggest that individuals derive happiness from experiences that promote personal development, novelty, and meaningful connections with others. Health & Well-being, Contribution & Service, and Career & Work are also identified as significant contributors to happiness, with counts ranging between 35 and 41 mentions. Additionally, Creativity & Hobbies, Spirituality, Faith & Values, are highlighted as important factors, with counts of 25 and 10 mentions respectively, showcasing the diverse array of sources from which individuals derive happiness within this respondent group.

Demographics and Happiness

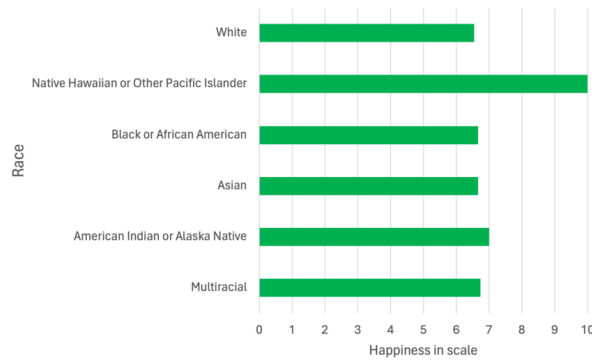


Figure 6: Race and happiness

The figure above displays the correlation of average happiness levels among racial groups in Ohio. The data reveals a consistent trend of all racial groups exhibiting an average happiness rating of 7. While Native Hawaiians or Other Pacific Islanders have averaged a high happiness rating of 10, it is important to note the low response rate of this particular race. This uniform distribution suggests a steady sense of contentment across diverse racial demographics within the state. However, the response rates from participants of color were significantly lower than white participants, suggesting self-reported happiness levels could be higher or lower with a larger sample size.

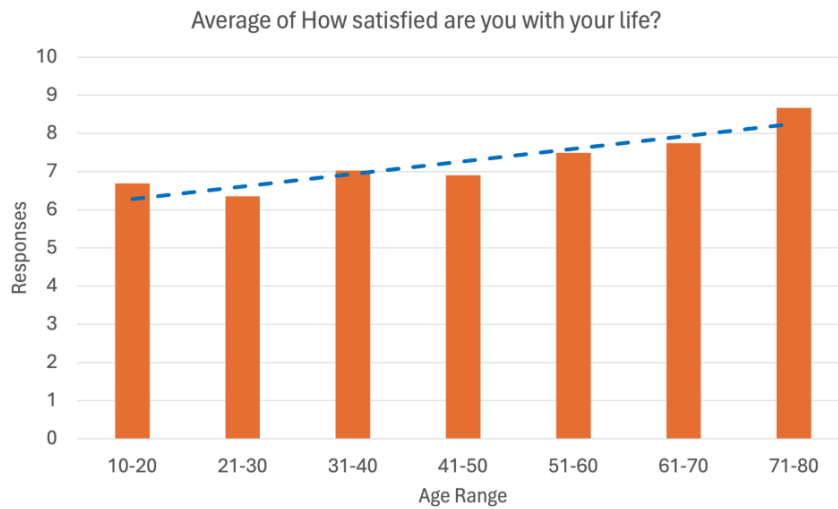


Figure 7: Age and happiness

Figure 7 illustrates the correlation between age and average happiness levels. Each bar represents the mean happiness score reported by individuals within specific age brackets. The trendline depicts a positive relationship between age and happiness with slight fluctuations. As age increases, there is a tendency towards higher reported levels of happiness, indicating a potential developmental trajectory of subjective well-being across the lifespan. This trend demonstrates the complexity of factors influencing happiness across different stages of life, encompassing social, psychological, and environmental variables. Understanding these dynamics is crucial for formulating targeted interventions and policies aimed at promoting well-being and quality of life across diverse age groups.

Correlation between Quantitative Responses

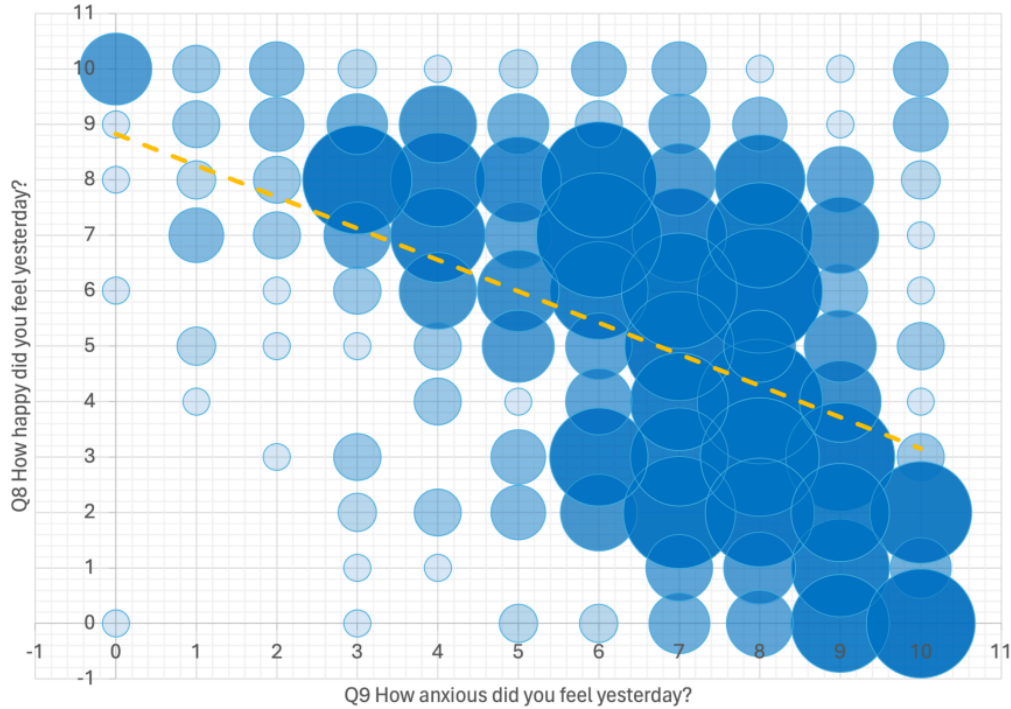


Figure 8: Anxiety and happiness

The correlation bubble chart presented in Figure 7 reveals a significant relationship between respondents' reported levels of happiness and anxiety. Through an analysis of responses to Question 8 ("How happy did you feel yesterday?") and Question 9 ("How anxious did you feel yesterday?"), a clear negative trendline emerges, indicating that as reported happiness levels decrease, reported anxiety levels tend to increase. This observation aligns with a well-established hypothesis suggesting an inverse relationship between happiness and anxiety (Hill et al., 2023).

The size of each bubble on the chart reflects the frequency of specific combinations of responses. These findings carry significant implications for understanding the relationship between happiness and anxiety within the surveyed population. By recognizing the negative correlation between these emotional states, policymakers, healthcare professionals, and researchers can develop targeted interventions and strategies aimed at promoting mental well-being and reducing anxiety levels.

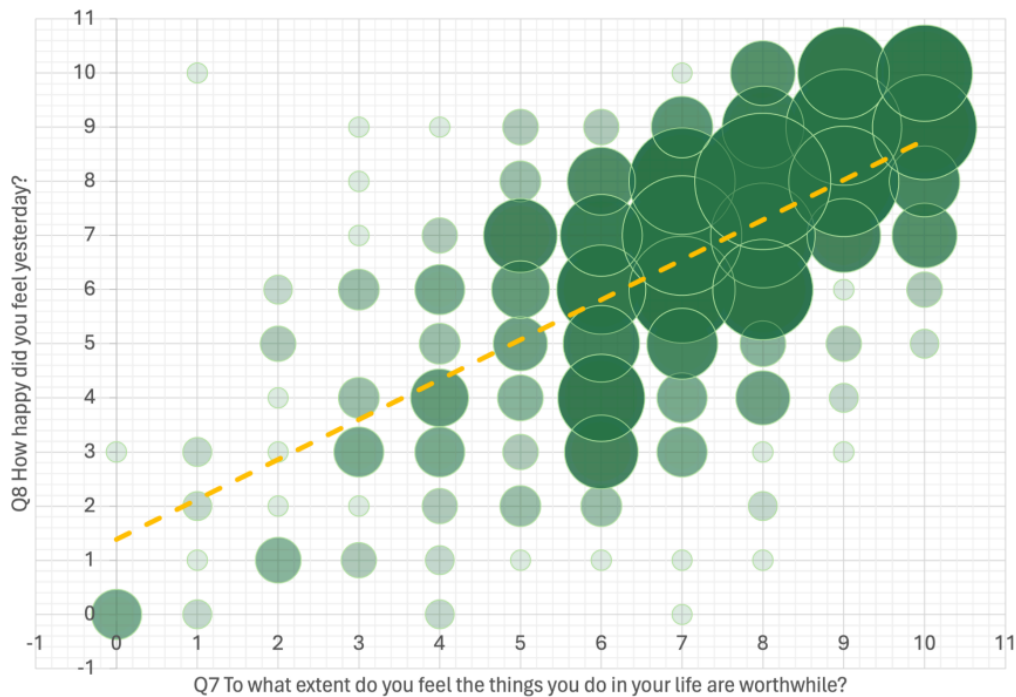


Figure 9: Worthwhileness and happiness

Similar to Figure 8, Figure 9 depicts the correlation between participants' perceptions of life's worthwhileness and their reported happiness levels. Question 7 inquired about the extent to which individuals feel their life pursuits are worthwhile, while Question 8 sought to gauge their happiness levels from the preceding day. The presence of a positive trendline, depicted in yellow, highlights a correlation between perceived life worthwhileness and reported happiness. This observation suggests that individuals who perceive their actions as more meaningful tend to report higher levels of happiness in their daily lives. Such findings may have implications for understanding the interplay between subjective perceptions of life satisfaction and emotional well-being.

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