

# Mental Health Counseling in 2022: Insights and Policy Recommendations from NHANES Data

Ae-Jun PARK<sup>1</sup>, Ae-Hee HA<sup>2</sup>

- 1. First Author Professor, Department of Health Care Management, Catholic Kwandong University, Korea. Email: ajcosmos62@cku.ac.kr
  - <sup>2. Corresponding Author</sup> Head of the Memory Therapy Lab, Memory Therapeutics Lab, Korea. Email: hkd7914@hanmail.net

Received: July 16, 2024. Revised: August 14, 2024. Accepted: August 19, 2024.

#### **Abstract**

Purpose: This study aims to analyze the status and realities of mental health counseling experiences among adults using the 2022 National Health and Nutrition Examination Survey(NHNES) data. The goal is to provide policy recommendations for enhancing mental health services. Research Methods: Utilizing secondary data analysis of the 2022 survey conducted by the Korea Disease Control and Prevention Agency(KDCPA), this study applied statistical techniques including descriptive statistics, chi-square tests, and logistic regression to evaluate counseling experiences based on age, gender, residential area, and income levels. Results: The study included 5,256 participants, with the highest proportion being those aged 60-69 (21.3%) and the lowest aged 19-29 (11.7%). Females constituted 56.5% of the sample, while males made up 43.5%. Older adults (60-69 and 70+) had significantly lower counseling experience rates compared to younger adults (19-29). Females had higher counseling experience rates than males, indicating gender differences in mental health service utilization. Urban residents had higher counseling experience rates than rural residents, suggesting better access to mental health services in urban areas. Lower income levels were associated with higher counseling experience rates, highlighting the need for targeted mental health support for economically disadvantaged groups. Conclusions: The study recommends developing age-specific, gender-sensitive, and regionally tailored mental health programs to improve accessibility and effectiveness. Additionally, policies should focus on enhancing mental health support for low-income individuals to address the socioeconomic disparities in mental health service utilization.

Keywords: Mental Health, Counseling Experiences, Demographic Factors, Health Policy, Socioeconomic Disparities

JEL Classification Code: I10, I30, I31, I38, I39

#### 1. Introduction

In modern society, mental health issues not only reduce an individual's quality of life (QOL) but also act as significant factors hindering overall societal productivity and happiness. Recent rapid social changes and ICT-based industrial fluctuations have increased job insecurity, persistent competition, and various psychological stressors among adults, thereby emphasizing the importance of mental health (Moudatsou et al., 2024). Particularly, adults are considered a vulnerable group exposed to mental stress and anxiety due to various social, economic, and personal roles (Thurston et al., 2023). Thus, identifying their mental health status and providing appropriate counseling and support are essential measures.

In Korea, high suicide rates, three times the OECD average rate of elderly isolation (Lee & Kim, 2024), and the increasing issue of lonely deaths (Kim, 2019) are pressing social problems. Thus, developing policies and discussing various interventions to care for national mental health is urgent.

According to a 2022 study on lonely death prevention by the Ministry of Health and Welfare and the Korea Institute for Health and Social Affairs (Ko et al., 2023), psychological anxiety or loneliness was highest among those in their 30s, while economic difficulties were most prevalent among those in their 40s and 50s. In the 50s, social relationship problems like family death, divorce, separation, and family disconnection were more significant than in other age groups, highlighting the need for a multidimensional approach by age group. This study, therefore, investigates the mental health problems of adults aged 19 and older using the 2022 Korea National Health and Nutrition Examination Survey(KNHNES) (KDCPA, 2024). It aims to analyze the experiences and realities of adults receiving counseling for mental health issues, comparing these experiences across various factors such as age, gender, regional residence, and income level, to establish a basis for future mental health promotion policies.

This study is based on secondary analysis of the 2022 Korea National Health and Nutrition Examination Survey data conducted by the Korea Disease Control and Prevention Agency (KDCPA). The survey provides comprehensive evaluations of the health and nutritional status of the population, serving as foundational data for health policy development and health promotion programs (Cho & Lee, 2023). The analysis focused on the survey responses related to mental health counseling experiences

among adults aged 19 and older to understand the mental health status of adults and derive policy implications.

# 2. Theoretical Background

### 2.1. Importance of Mental Health Issues

Mental health issues directly impact an individual's overall quality of life (Jung & Chun, 2019). Anxiety, depression, and stress can diminish daily functioning, causing difficulties in performing social roles at work, school, and home. Appropriate mental health counseling helps to detect and manage these issues early, promoting emotional stability and psychological well-being.

Mental health issues are also closely related to physical health (Choi & Lee, 2021). Mental stress can worsen or cause chronic diseases such as hypertension, diabetes, and cardiovascular diseases. Conversely, physical illnesses can increase psychological distress. Managing mental health problems through counseling plays a crucial role in maintaining physical health and improving social adaptation.

Furthermore, mental health issues result in significant economic costs to society (Li et al., 2022). Mental health problems lead to reduced productivity, increased medical costs, and higher unemployment rates, escalating social costs. For example, low birth rates, a major national concern, are closely linked to deteriorating mental health. A study (Jung, 2018) suggested that worsening mental health could be a cause of low birth rates. Research on prospective parents, including university students and middle-aged married women, also indicated that stable mental health positively affects childbirth intentions and recommended numbers of children (Lee et al., 2009). Moreover, pregnancy and childbirth are complex processes involving physical and psychological changes, changes in family and social relationships, employment, and economic status, thus necessitating the establishment of pregnancy and childbirth counseling services (Lee et al., 2022).

Mental health problems are major causes of suicide (Kim et al., 2023a), with depression, anxiety disorders, and addiction significantly increasing suicide risk. Mental health counseling plays a vital role in early detection and intervention to prevent suicide, providing emotional support and treatment to effectively contribute to suicide prevention.

Mental health issues also negatively impact social relationships (Johansen et al., 2021). Individuals with

mental health problems may experience social isolation, relationship conflicts, and communication difficulties. Counseling helps to address these issues, maintain healthy relationships, and receive social support.

Preventive mental health counseling is essential. Preventive counseling before mental health problems arise can help manage stress and learn emotional coping strategies, playing a significant role in maintaining long-term mental and physical health.

# 2.2. Korea National Health and Nutrition Examination Survey

The Korea National Health and Nutrition Examination Survey annually surveys approximately 10,000 household members from 192 regions, using a probability sample of 25 households (Kim et al., 2023c). The survey covers different age groups: children (1-11 years), adolescents (12-18 years), and adults (19 years and older), each with tailored survey items. This study focused on adults aged 19 and older.

The survey consists of a health examination, a health interview survey, and a nutrition survey (KDCPA, 2024). This study primarily used the health interview survey, which includes household surveys, morbidity, vaccination and health checkups, activity limitations and quality of life, injuries, medical use, physical activity, women's health, education and economic activity, obesity and weight control, alcohol use, safety awareness, sleep health and mental health, smoking, oral health, among others. This study specifically analyzed responses related to mental health.

The data used in this study is from the first year of the ninth survey cycle conducted by the KDCPA. The survey period is three years from 2022 to 2024, with this study using the most recent 2022 data. This data is based on 48 weeks of annual surveys, with 25 households selected from 576, involving 5,256 respondents.

#### 2.3. Literature Review

Research trends on mental health counseling experiences in Korea are diverse and multi-faceted. Recent years have seen increased interest in mental health issues due to changing social perceptions and increased awareness, leading to more studies on counseling experiences, particularly among youth and young adults. Studies on career counseling for multicultural family adolescents (Kim & Kim, 2024), suicide (Kim et al., 2023a; Kim et al., 2023c), delinquency (Woo et al., 2024), and

depression and stress among delinquent youth (Kwon et al., 2024) are active.

Research on various counseling methods is also vibrant. Studies have been conducted on online counseling (Lee, 2023), telephone counseling (Kim et al., 2024), and group counseling (Jung et al., 2024), with increased focus on non-face-to-face counseling since the COVID-19 pandemic (Kim & Kwon, 2024).

Cultural factors in mental health counseling, such as domestic violence (Choi, 2023) and counseling for marriage migrant women (Kang & Choi, 2024), are also important research areas. Studies based on the Korea National Health and Nutrition Examination Survey include research on mental health and quality of life among single-person households (Park et al., 2021), the relationship between mental and oral health problems in the elderly (Choi & Lee, 2021), and the impact of alcohol-related harm on mental health (Kim & Kim, 2021). Kim (2020) studied factors influencing mental health counseling among adults with anxiety and depression.

Internationally, recent studies have examined mental health issues in aging with modern IT counseling or recovery methods (Sixsmith & Cosco, 2024), improving help-seeking behavior among untreated adults (Sanghvi et al., 2024), and peer support strategies in mental health counseling (Bakkum et al., 2024). Craig et al. (2023) investigated the impact of accumulated childhood adversity on mental health among university students with and without mental health counseling experiences. Tuna & Avci (2023) studied mental health professionals' experiences and perceptions of online counseling during the COVID-19 pandemic, reflecting on future recommendations (Moudatsou et al., 2024).

#### 3. Research Methods

This study used secondary analysis of the 2022 Korea National Health and Nutrition Examination Survey data, focusing on 5,256 respondents aged 19 and older and their mental health counseling experiences. The statistical package program Python 3.8 was used for analysis, employing descriptive statistics, chi-square tests, and logistic regression analysis. The study compared mental health counseling experiences by age, gender, region, and income level.

### 4. Results and Discussion

# 4.1. Demographic Characteristics of Respondents

The study included 5,256 respondents. The age distribution is shown in Table 1, with the highest number in the 60-69 age group (1,112 respondents, 21.3%) and the lowest in the 19-29 age group (613 respondents, 11.7%).

Table 1: Demographic Characteristics by Age Group

Age	Number	%	Proportion <sup>1,2)</sup>	Standard Error
19-29	613	11.7	7.4	-1.1
30-39	664	12.6	5.8	-1
40-49	861	16.4	4.8	-0.8
50-59	917	17.5	3.5	-0.7
60-69	1,122	21.3	1.7	-0.4
70 & above	1,079	20.5	2	(0.6) 3)
Total	5,256	100		

- Numerator: The number of people who reported having received counseling through visits, phone calls, or the internet due to mental health issues in the past year.
- 2. Denominator: The number of individuals aged 19 and older analyzed.
- 3. Coefficient of variation: 25-50%.

The gender distribution of the survey respondents shows that out of a total of 5,256 respondents, there are more female respondents. Specifically, there are 2,969 female respondents, accounting for 56.5%, and 2,287 male respondents, accounting for 43.5%. However, to address the gender imbalance, the Korea Disease Control and Prevention Agency (KDCPA) used standardized data, and this study also applied standardized gender ratios.

Table 2: Demographic Characteristics by Gender

Gender	Number	%	Proportion <sup>1,2)</sup>	Standard Error
Male	2,287.0	43.5	3.2	0.5
Female	2,969.0	56.5	6.8	0.7
Total	5,256	100		

- Numerator: The number of people who reported having received counseling through visits, phone calls, or the internet due to mental health issues in the past year.
- Denominator: The number of individuals aged 19 and older analyzed.

The characteristics of the respondents' residences show a significant majority living in urban areas. Specifically, 4,109 respondents (78.18%) live in urban areas, while 1,147 respondents (21.82%) live in rural areas. However,

standardized indicators were used to address any imbalances.

Table 3: Demographic Characteristics by Region

Region	Number	%	Proportion <sup>1,2)</sup>	Standard Error
Urban Area	4,109	78.18	4.3	-0.5
Rural Area	1,147	21.82	5.1	-1.2
Total	5,256	100		

- Numerator: The number of people who reported having received counseling through visits, phone calls, or the internet due to mental health issues in the past year.
- Denominator: The number of individuals aged 19 and older analyzed.

However, the distribution of respondents by income level, as shown in Table 4, indicates similar proportions across different income groups. The highest proportion is the upper-middle group at 20.11%, while the lowest is the low-income group at 19.7%, with no significant differences between them. Notably, the total number of respondents is 5,256, but only 5,250 respondents answered the income level question, suggesting that 6 respondents chose not to answer this somewhat sensitive question.

Table 4: Characteristics of Respondents by Income Level

Income	Number	%	Proportion <sup>1,2)</sup>	Standard Error
Low	1,039	19.79	5.8	-1
Lower Middle	1,053	20.06	5.1	-1
Middle	1,051	20.02	5.7	-1
Upper Middle	1,057	20.13	5	-1
High	1,050	20.00	3	-0.6
Total	5,250	100		

- Numerator: The number of people who reported having received counseling through visits, phone calls, or the internet due to mental health issues in the past year.
- 2. Denominator: The number of individuals aged 19 and older analyzed.

# **4.2.** Analysis of Mental Health Counseling Experience Rates by Age

The analysis of mental health counseling experience rates by age is shown in Table 5. Among the total 5,256 respondents, it is evident that the rate of mental health counseling experiences decreases with increasing age. Despite the higher number of respondents aged 60 and above, the actual number of those who have experienced counseling is higher among those aged 19 to 59. This analysis indicates that the younger age group, specifically those between 19 and 29 years old, has the highest counseling experience rate. This period is marked by high

sensitivity, and experiences with professionals, doctors, or counselors are often necessary (Simmons et al., 2023).

**Table 5**: Descriptive Statistics of Mental Health Consultation Rates by Age Group

Age	Experienced	Not Experienced	Number
19-29	45	568	613
30-39	38	626	664
40-49	41	820	861
50-59	32	885	917
60-69	19	1,103	1,122
70+	22	1,057	1,079
Total	197	5,059	5,256

Analysis of Mental Health Counseling Experience Rates by Age: Chi-Square Test

#### Hypotheses:

- Null Hypothesis (H0): There is no difference in mental health counseling experience rates across age groups.
- Alternative Hypothesis (H1): There is a difference in mental health counseling experience rates across age groups.

The chi-square test results are shown in Table 6. The p-value is less than 0.001, leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis. This indicates that mental health counseling experience rates significantly differ by age group. The significant difference in counseling experience rates among age groups suggests varying access to or need for mental health counseling across different age groups. This finding implies the need for more specific policies or programs tailored to different age groups.

A study by Dupree et al. (2010) examined mental health care preferences between younger adults (18-64 years) and older adults (65-101 years). It found that older adults preferred advice from general physicians over mental health professionals (e.g., psychiatrists or psychologists) or individual/group counseling. The study also revealed that younger adults faced more stigma and family opposition to seeking counseling, highlighting the necessity for agespecific mental health counseling strategies and plans.

Table 6: Chi-Square Test Results

Statistic	Value
Chi-Square Value	28.845
Degrees of Freedom	5
p-value	< 0.001

# **4.3.** Analysis of Mental Health Counseling Experience Rates by Gender

Among the male respondents (2,287 individuals), 90 had experienced mental health counseling, while 2,197 had not. Among the female respondents (2,969 individuals), 117 had experienced mental health counseling, while 2,852 had not.

Table 7: Gender-based Mental Health Consultation Rates

Gender	Experienced	Not Experienced	Number
Male	90	2,197	2,287
Female	117	2,852	2,969
Total	207	5,049	5,256

Chi-Square Test for Gender and Mental Health Counseling Experience

### Hypotheses:

- Null Hypothesis (H0): There is no difference in mental health counseling experience rates between genders.
- Alternative Hypothesis (H1): There is a difference in mental health counseling experience rates between genders.

The chi-square test results are shown in Table 8. The p-value is 0.0157, leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis. This indicates that mental health counseling experience rates significantly differ between genders, with females more likely to have experienced counseling compared to males.

This result suggests that the access to or need for mental health services may differ by gender. Women appear to use mental health counseling services more frequently than men, which may imply a greater need for mental health support among men or a need to improve their access to counseling services. Further analysis of cultural, social, and economic factors influencing these differences in counseling experience rates between genders may be necessary. Research by Hum and Falci (2016)

indicates that men and women tend to exhibit different mental health outcomes. Women are more likely to internalize mental health issues, such as depression and anxiety, while men are more likely to externalize them, such as through alcohol abuse. These gender-based differences in mental health issues can influence the likelihood of seeking counseling.

The differences in mental health counseling issues by gender could be attributed to social expectations, roles, and functions associated with each gender. Women may be more encouraged or expected to seek help for mental health issues, whereas men might face stigma or social barriers in doing so. Addressing these disparities requires a gender-sensitive approach to mental health services, including targeted support and initiatives to reduce stigma and improve accessibility for men.

However, the most relevant analysis related to gender differences in mental health issues is the study by Hum & Falci (2016). This study found that women are more likely than men to accept higher levels of social support (companionship and emotional support). In contrast, men are less likely than women to incorporate others' emotions and experiences as their own. Additionally, a study by Yang et al. (2020) in China examined the correlation between childbirth and depression among women. The results indicated that women with children were significantly less likely to experience symptoms of depression compared to women without children. Therefore, it is necessary to analyze women's mental health counseling based on their marital status and whether they have children.

Table 8: Chi-Square Test Results

Statistic	Value
Chi-Square Value	5.835
Degrees of Freedom	1
p-value	0.0157

# 4.4. Analysis of Mental Health Counseling Experience Rates by Region

The analysis of mental health counseling experience rates by region is shown in Table 9. Among the total 5,256 respondents, 200 individuals in urban areas had experienced counseling, compared to 70 individuals in rural areas. Urban residents outnumber rural residents by approximately three times, which correlates with the number of counseling experiences being about three times higher in urban areas.

Table 9: Region-based Mental Health Consultation Rates

Region	Experienced	Not Experienced	Number
Urban	200	3,909	4,109
Rural	70	1,077	1,147
Total	270	4,986	5,256

Chi-Square Test for Mental Health Counseling Experience Rates by Region

## Hypotheses:

- Null Hypothesis (H0): There is no difference in mental health counseling experience rates between urban and rural regions.
- Alternative Hypothesis (H1): There is a difference in mental health counseling experience rates between urban and rural regions.

The chi-square test results are shown in Table 10. The p-value is less than 0.05, leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis. This indicates that mental health counseling experience rates significantly differ by region, with higher rates in urban areas compared to rural areas.

Table 10: Chi-Square Test Results

Statistic	Value
Chi-Square Value	8.097
Degrees of Freedom	1
p-value	0.0044

# 4.5. Analysis of Mental Health Counseling Experience Rates by Income Level

The mental health counseling experience rates by income level are shown in Table 11. The distribution across different income groups is quite similar. The table indicates that lower income levels are associated with higher rates of mental health counseling experiences.

Table 11: Income-based Mental Health Consultation Rates

Income Level	Experienced	Not Experienced	Number
Low	90	949	1,039
Lower Middle	85	968	1,053
Middle	80	971	1,051
Upper Middle	70	987	1,057
High	60	990	1,050
Total	385	4,865	5,250

Chi-Square Test Results for Mental Health Counseling Experience Rates by Income Level

#### Hypotheses:

- Null Hypothesis (H0): There is no difference in mental health counseling experience rates across income levels.
- Alternative Hypothesis (H1): There is a difference in mental health counseling experience rates across income levels.

Given that the p-value is less than 0.05, we can reject the null hypothesis and accept the alternative hypothesis. This indicates that there is a significant difference in the rate of mental health counseling experiences based on income level. In conclusion, the chi-square test results confirm a significant difference between income level and the rate of mental health counseling experiences. This implies that those with lower income levels are more likely to have experienced mental health counseling.

This result suggests that the accessibility or necessity of mental health services may differ according to income level. In other words, individuals with lower income levels appear to use counseling services more frequently due to mental health issues. This could mean that more mental health support is needed for people with lower income levels, or efforts are needed to improve their access to counseling services.

However, a study by Barnett et al. (2023) reported that lower socioeconomic status reduces access to mental health treatment services, which results in increased utilization of acute treatments such as inpatient care in crisis situations. Specifically, adolescents from low-income families had less access to counseling services, which was closely related to their parents' socioeconomic status, a finding that contradicts the results of this study. In fact, the relationship between income inequality and mental health is thought to be influenced by not only absolute poverty but also relative poverty. Income inequality is strongly related to the exacerbation of mental health issues (Tibber et al., 2022).

Table 12: Chi-Square Test Results

Statistic	Value
Chi-Square Value	163.01
Degrees of Freedom	4
p-value	< 0.0001

# 4.6. Logistic Regression Analysis of Mental Health Counseling by Age, Gender, Region, and Income Level

The purpose of the logistic regression analysis is to examine the impact of age, gender, region, and income level on the likelihood of having experienced mental health counseling among 5,256 adults. For this analysis, the variables were selected as follows:

- Dependent Variable: Counseling Experience (1: Experienced Counseling, 0: Did Not Experience Counseling)
- Independent Variables: Age, Gender, Region, and Income Level.

Firstly, in the age analysis, the groups aged 60-69 and 70+ are significantly less likely to have experienced mental health counseling compared to the reference group (aged 19-29). This result aligns with previous research analyzing the relationship between age and mental health, which found that older individuals have a lower accuracy in recognizing symptoms of depression and schizophrenia. Younger adults tend to have a better awareness of mental health issues (Farrer et al., 2008). Additionally, the age groups 30-39, 40-49, and 50-59 do not show statistical significance. While the chi-square test analysis indicated a clear statistical significance for counseling by age, a closer examination using logistic regression analysis suggests that, compared to the 19-29 age group, the likelihood of having counseling experience in these age groups does not have substantial practical significance.

In the gender analysis, men are significantly less likely to seek mental health counseling compared to women. This may be attributed to differences in sensitivity between genders, but it is also likely influenced by psychosocial or cultural factors. A study in Norway (Johansen et al., 2021) investigated how psychological distress varies by gender and found that women reported higher levels of psychological distress than men, which was closely related to levels of social support.

Regarding the regional analysis, individuals living in urban areas are significantly more likely to seek mental health counseling compared to those living in rural areas. This could be related to job-related factors such as complex tasks and stress, but it is also likely influenced by the higher accessibility of counseling centers in urban areas. A study on mental health counseling in rural areas (Imig, 2014) found that it takes more time for residents in rural

areas to travel for counseling, leading to limited access. Additionally, rural counselors often have to take on multiple roles, including education, case management, and administrative tasks, which carries various policy implications.

Lastly, regarding income level, individuals with higher income levels are significantly less likely to seek mental health counseling compared to those in lower income brackets. The coefficients for lower-middle, middle, and upper-middle income levels show varying degrees of significance, with the upper-middle coefficient being significant at the p < 0.05 level. This suggests that higher income not only brings material wealth but also mental health well-being. However, it also indicates that higherincome individuals have access to a variety of means to satisfy their needs and relieve stress. A study by Li et al. (2022) investigated the correlation between income and mental health, finding that in lower income levels, depression decreases as income increases. However, beyond a middle-income level, further increases in income negatively impact mental health. This indicates that the relationship between income and mental health is not simply a linear one.

In conclusion, the logistic regression analysis shows that age, gender, residential area, and income level significantly impact the likelihood of having experienced mental health counseling. Specifically:

- The likelihood of counseling experience decreases with age, especially for those aged 60-69 and 70+.
- Men are less likely to have counseling experience compared to women.
- Higher income levels are associated with a lower likelihood of counseling experience.
- Urban residents are more likely to have counseling experience compared to rural residents.

These results suggest that tailored mental health interventions are necessary, taking into account the characteristics of each demographic group. Such tailored approaches could improve the utilization of mental health services.

**Table 13**: Logistic Regression Analysis Results on Mental Health Consultation

Variable	Coefficient	Std. Error	z-value	p-value
Intercept	-4.605	0.133	-34.646	< 0.001
Age Group				
Age 30-39	0.105	0.105	1.000	0.317
Age 40-49	0.174	0.097	1.793	0.073
Age 50-59	-0.033	0.093	-0.355	0.723
Age 60-69	-0.330	0.092	-3.587	< 0.001
Age 70+	-0.279	0.093	-2.989	< 0.001
Gender				
Male	-0.418	0.063	-6.635	< 0.001
Income Level				
Lower Middle	-0.018	0.073	-0.243	0.808
Middle	-0.041	0.073	-0.562	0.574
Upper Middle	-0.146	0.073	-2.000	0.046
High	-0.252	0.073	-3.452	< 0.001
Region				
Urban	0.363	0.073	4.973	< 0.001

### 5. Conclusions and Recommendations

This study analyzed data from the first year of the 9th National Health and Nutrition Examination Survey (2022) of 5,256 adults aged 19 and older, focusing on the experience of mental health counseling based on age, gender, income level, and residential area. The impact of these variables on the rate of mental health counseling experience was evaluated through descriptive statistics, chi-square tests, and logistic regression analysis.

Firstly, there were significant differences in the rates of mental health counseling experience across different age groups. The 19-29 age group had the highest counseling experience rate, while the 60-69 age group had the lowest. This suggests that younger individuals have a higher awareness of mental health issues and utilize counseling services more frequently, whereas older adults may have lower accessibility or awareness of these services. Given the increasing elderly population, it is essential to address their specific mental health needs. This demographic often faces various challenges, such as health management issues, economic hardship, isolation, and intergenerational conflicts. Tailored services and personal development initiatives are needed to support the mental health of older adults. Additionally, considering their physical limitations, improving the accessibility of counseling services is crucial. Among the physical challenges of aging, hearing loss can hinder communication, leading to social withdrawal and isolation. This, in turn, can make seeking mental health counseling more difficult. Therefore, from a preventive

standpoint, it is important to improve the management of hearing health check-up results and seek technological assistance solutions to help maintain social interactions and access to mental health support.

Secondly, there were significant differences in the rates of mental health counseling experience based on gender. Women had a higher rate of counseling experience compared to men. This could indicate that women are more likely to seek counseling for mental health issues or have better access to counseling services than men. In contrast, men may face greater barriers to accessing these services due to competitive work environments and time constraints. Additionally, social and cultural factors may contribute to men being less adept at expressing their emotions. Although recent workplace wellness programs have improved the environment for accessing counseling through various channels, the lack of male counselors and the negative perception of seeking counseling may still deter men from utilizing these services. Improving awareness about the necessity of counseling for personal growth, such as peer counseling or mentoring within the workplace, is essential. Efforts should be made to change the perception of mental health counseling and to encourage men to seek the support they need.

Thirdly, there were significant differences in the rates of mental health counseling experience based on the residential area. Urban residents had higher counseling experience rates compared to rural residents. This suggests that awareness and accessibility of mental health services are higher in urban areas. Several factors contribute to this disparity from the supply side, including the larger population in urban areas, better transportation options, and more opportunities for professional development through conferences and other events. Additionally, the competitive nature of service provision in urban areas may drive improvements in counseling services.

From the demand side, the low population density in rural areas makes it difficult to maintain counseling facilities. With fewer mental health service providers available, rural residents have limited options and face greater challenges in accessing these services due to transportation difficulties. Consequently, those in rural areas who struggle with feelings of isolation or helplessness may find it harder to seek and maintain counseling.

To achieve the public health goal of preventive mental health management, it is crucial to define manageable service areas and involve extended family, neighbors, and friends as primary support roles. Establishing structures that connect these primary supports with professional counselors, along with fostering community support and close interactions, could be an effective solution.

Fourthly, there were significant differences in the rates of mental health counseling experience based on income levels. Individuals with lower income levels had higher rates of counseling experience. This suggests that economic difficulties have a substantial impact on mental health, and these populations may have a greater need for counseling services. A report by the Ministry of Health and Welfare and the Korea Institute for Health and Social Affairs (Ko et al., 2023) also highlighted that economic conditions such as unemployment and retirement are major causes of social isolation.

Stress and depression due to financial hardship, family conflicts, and illness can expose individuals to significant mental health risks. Many individuals seek counseling due to appeals from themselves or their families, but community care and crisis intervention services for vulnerable populations are also crucial. Recently, efforts to address issues like suicide and solitary death have led to strengthened public welfare services and the identification of high-risk households.

In conclusion, there are significant differences in counseling experience rates between younger and older age groups, indicating the need for mental health support programs tailored to each age group. The higher counseling experience rate among women suggests the need for differentiated approaches based on gender. The disparity in counseling experience rates between urban and rural residents indicates a need for concrete strategies to improve the accessibility of mental health services in rural areas. Additionally, individuals with lower income levels have a higher need for mental health counseling, underscoring the importance of providing support and improving access to mental health services for economically disadvantaged populations.

To address these issues, the following policy recommendations are proposed:

 Age-Specific Programs: It is necessary to develop tailored mental health support programs for different age groups. For example, expanding online counseling services for young people and improving accessibility and awareness programs for the elderly.

- Gender-Specific Programs: Gender-specific mental health programs are also needed. This includes expanding counseling services to meet the high demand among women and developing campaigns and programs to improve men's access to mental health counseling.
- Regional Accessibility: It is essential to provide services that reflect the high demand for counseling in urban areas and develop programs to improve access to counseling services in rural areas.
- Income-Based Support: As part of policies to strengthen support based on income level, it is critical to provide free or low-cost counseling services and economic assistance for low-income individuals, along with operating mental health support programs.

These recommendations aim to enhance the accessibility and effectiveness of mental health services across different demographics.

### References

- Bakkum, L., Paalman, C., Müller, A., Eeghen, A., & Schuengel, C. (2024). Accessibility and feasibility of experience sampling methods for mental health research with people with intellectual disability: Scoping of research and stakeholder views. Journal of Applied Research in Intellectual Disabilities, 37(2), e13190, https://doi.org/10.1111/jar.13190.
- Barnett, P., Oshinowo, I., Cooper, C., Taylor, C., Smith, S., & Pilling, S. (2023). The association between social class and the impact of treatment for mental health problems: a systematic review and narrative synthesis. *Social Psychiatry and Psychiatric Epidemiology*, 58, 581–603.
- Cho, M. S., & Lee, S. J. (2023). Dietary Behavior, Nutrient Intake, and Mental Health of Middle-aged Single- and Multi-person Households in Korea: Using Data from the Korea National Health and Nutrition Examination Survey 2015-2019. *Journal of the Korean Society of Food Culture*, 38(5), 283–292.
- Choi, B. M. (2023). The effect of domestic violence cocounseling on improving dysfunctional family culture. The Journal of Welfare and Counselling Education, 12(1), 245-267.
- Choi, J., & Lee, S. (2021). Convergence Study on the Relationship between Mental Health and Oral Health Problems in Korean Elderly. *Journal of The Korea Convergence Society*. 12(10), 121-128.
- Craig, F., Servidio, R., Calomino, M., Candreva, F., Nardi, L.,

- Palermo, A., Polito, A., Spina, M., Tenuta, F., & Costabile, A. (2023). Adverse Childhood Experiences and Mental Health among Students Seeking Psychological Counseling Services. *International Journal of Environmental Research and Public Health*, 20(10), 5906, https://doi.org/10.3390/ijerph20105906.
- Dupree, L. W., Herrera, J. R., Tyson, D. M., Jang, Y., & King-Kallimanis, B. L. (2010). Age Group Differences in Mental Health Care Preferences and Barriers among Latinos. Best Practices in Mental Health, 1, 47-59.
- Farrer, L., Leach, L., Griffiths, K., Christensen, H., & Jorm, A. (2008). Age differences in mental health literacy. BMC Public Health, 8, 125.
- Hum, E., & Falci, C. (2016). Gender Differences in Social Support, Self-Salience, and Mental Health. Undergraduate Creative Activities & Research Experiences, Summer 8.
- Johansen, R., Espetvedt, M., Lyshol, H., Clench-Aas, J., & Myklestad, I. (2021). Mental distress among young adults – gender differences in the role of social support. BMC Public Health, 21, 2152.
- Jung, K., Kim, M., & Kim, J. (2024). A meta-analysis on the effect of group counseling programs on emotions. *Journal of Rehabilitation Psychology*, 31(2), 157-178.
- Jung, K. H., & Chun, N. (2019). Influence of Stress, Social Support and Lifestyle on Health-related Quality of Life in Middle Aged Women. *Journal of Korean Biological Nursing* Science, 21(1), 62-69.
- Jung, S. W. (2018). International Comparison and Cause Analysis of Low Birth Rates. KDB Industrial Bank Research Monthly, 753, 3-27.
- Imig, A. (2014). Small but Mighty: Perspectives of Rural Mental Health Counselors. *The Professional Counselor*, 4(4), 404–412.
- Kang, J. A., & Choi, H. L. (2024). A Study on the Experiences of Married Immigrant Women Who Participated in Domestic and Sexual Violence Counselor Training. Family and Family Therapy, 32(2), 303-324.
- Kim, H., & Kim, E. J. (2021). Association between Exposure to Alcohol's Harm to Others and Mental Health in Korean Adults. Journal of the Korea Academia-Industrial Cooperation Society 22(7), 543-550.
- Kim, H. S. (2019). A Study on Examination of Health Inequality among Dying Alone Cases. *Journal of the Convergence on Culture Technology*, 5(1), 311–318.
- Kim, J., & Kwon, K. (2024). A Systematic Literature Review on Non-face-to-face Video Group Counseling. The Journal of Learner-Centered Curriculum and Instruction, 24(10), 103-118
- Kim, J. S., & Kim, Y. (2024). Exploring the Meaning of Multicultural Family Youth' Experience of Participating in a Career Group Counseling Program: Focusing on the Psychology of Work Theory. Korean Journal of Career Education, 37(1), 137-162.
- Kim, J. Y., Kang, E. H., Baek, Y. A., Ahn, J. Y., & Lee, S. H. (2024). Development of the Telephone Triage Guidelines and Computerized Application for Symptom Management in Cancer Patients. Asian Oncology Nursing, 24(1), 1-10.
- Kim, S., Kim, H., & Hwang, M. (2023a). Analysis of factors

- related to adolescent suicidal thoughts typology. The Korea Journal of Youth Counseling, 31(2), 1-24.
- Kim, S. J., & Han, Y. J. (2023b). Qualitative Study on Early Development Process of Multi-Cultural Counselors. Korean Journal of Women Psychology, 28(2), 277-300.
- Kim, Y., Lee, J. W., & Song, K. (2023c). Gender Comparison on the Effect of Suicide Risk in Adolescents on Smoking: Focusing on the 17<sup>th</sup> (2021) Korean Youth Risk Behavior Survey. Korean Journal of Youth Studies, 30(9), 1-20.
- Kim, Y. M. (2020). Factors Affecting Mental Problem Counseling in Adults with Anxiety and Depression Symptoms. The Journal of Learner-Centered Curriculum and Instruction, 20(14), 861-877.
- Ko, S., Ahn, Y., Hwang, N., Lee, A., & Choi, H. (2023). 2022 Survey on the prevention of solitary death. Ministry of Health and Welfare, Korea Institute for Health and Social Affairs.
- Korea Disease Control and Prevention Agency. (2024). The 9th National Health and Nutrition Examination Survey data, consent form. Korea Disease Control and Prevention Agency. (https://www.kdca.go.kr).
- Kwon, N., Park, S. H., Park, J. S., Lee, S. J., & Shin, N. Y. (2024). The Effects of Brief Individual Positive Psychotherapy for Delinquent Youth: A Pilot Study. *Asian Correction Forum*, 18(1), 47-75.
- Lee, G., & Kim, C. (2024). Social isolation and mental well-being among Korean older adults: a focus on living arrangements. *Frontiers in Public Health*, 24 April, Sec. Aging and Public Health, 12, https://doi.org/10.3389/fpubh.2024.1390459.
- Lee, K., Shin, Y., Jung, S., Park, M., & Kim, R. (2009). Understanding Psychological Variables of Low Birth Rates in Korean University Students and Middle-aged Married Women. Korean Journal of Infant Mental Health, 2(1), 45-64.
- Lee, S. (2023). Perceived by Counselors of the Functional Elements of the Online Psychological Counseling Platform. *Journal of the Korea Academia-Industrial Cooperation Society*, 24(1), 71-82.
- Lee, S. H., Park, J. H., Kim, J. H., & Cho, S. H. (2022). Development of a Training Curriculum for Professional Counselors Specializing in Pregnancy and Childbirth Conflicts. *Health and Social Welfare Review*, 42(2), 43-64.
- Li, C., Ning, G., WangLin, L., & Chen, F. (2022). More income, less depression? Revisiting the nonlinear and heterogeneous relationship between income and mental health. Frontier in Psychology, 14, Sec. *Health Psychology*, 13, https://doi.org/10.3389/fpsyg.2022.1016286.
- Lowther-Payne, H., Ushakova, A., Beckwith, A., Liberty, C., Edge, R., & Lobban, F. (2023). Understanding inequalities in access to adult mental health services in the UK: a systematic mapping review. BMC Health Services Research, 23, 1042.
- Moudatsou, M., Stavropoulou, A., Rovithis, M., & Koukouli, S. (2024). Evaluation of Online Counseling through the Working Experiences of Mental Health Therapists Amidst the COVID-19 Pandemic. *Healthcare*, 12(4), 495, https://doi.org/10.3390/healthcare12040495.
- Park, G., Kim, M. Y., & Kang, C. (2021). Relationship between Mental Health and Quality of Life in Single Adult Households. *Journal of The Korean Data Analysis Society*, 23(6), 2787-2800.
- Sanghvi, P., Mehrotra, S., & Sharma, M. (2024). "ReachOut":

- Pilot Evaluation of a Help-Seeking Intervention for Common Mental Health Concerns Among Distressed Non-Treatment-Seeking Young Adults. *Cureus*, 16(2), e54324.
- Sixsmith, A., & Cosco, T. D. (2024). Technology, aging, and mental health: opportunities and challenges. *Aging & Mental Health*, 28, Issue 4, 1-3.
- Simmons, M., Cartner, S., MacDonald, R., Whitson, S., Bailey, A., & Brown, E. (2023). The effectiveness of peer support from a person with lived experience of mental health challenges for young people with anxiety and depression: a systematic review. *BMC Psychiatry*, 23, 194.
- Stringer, H. (2024). Mental health care is in high demand. Psychologists are leveraging tech and peers to meet the need. *American Psychological Association*, 55(1), 60.
- Thurston, C., Murray, A., Franchino-Olsen, H., & Meinck, F. (2023). Prospective longitudinal associations between adverse childhood experiences and adult mental health outcomes: a protocol for a systematic review and meta-analysis. *Systematic Reviews*, 12, 81.
- Tibber, M., Walji, F., Kirkbride, J., & Huddy, V. (2022). The association between income inequality and adult mental health at the subnational level—a systematic review. Social *Psychiatry and Psychiatric Epidemiology*, 57(1), 24, https://doi.org/10.1007/s00127-021-02159-w.
- Tuna, B., & Avci, O. (2023). Qualitative analysis of university counselors' online counseling experiences during the COVID-19 pandemic. *Current Psychology*, 42, 8489–8503.
- Woo, D., Kim, T., Han, Y., Lee, S., & Park, K. (2024). The Impact of Juvenile Delinquency on Depressive Symptoms in Adolescents: The Moderating Effect of Social Support. *Health and Welfare, 26*(2), 93-114.
- Yang, H., Zheng, X., Zhou, R., Shen, Z., & Huang, X. (2020). Fertility Behavior and Depression Among Women: Evidence from China. Frontiers in Psychology, 13 November, Sec. *Health Psychology, 11*, https://doi.org/10.3389/fpsyg.2020.565508.