Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

Spousal Age Difference and Mental Health by Sex: Korean Survey Results

Ji-Su Kim[1], Hyejin Kim[2]

Abstract

Problems in marital relationships due to age gap between a couple may lead to depression and other mental health issues. However, there is a lack of studies that investigated the association between age gap in couples and mental health. Therefore, this study aimed to identify the relationship between spouse age differences and mental health.The data of 7,454 couples from the 2008 and 2012 Korean National Health and Nutrition Examination Surveys were used. Multiple logistic regression analysis was performed. Women who were ≥10 years older or younger than their husbands displayed poor mental health. Odds ratios (ORs) for women who were ≥10 years younger were 1.72, 1.77, 2.24, and 1.69 for stress perception, depression experiences, depression diagnosis, and suicidal ideation, respectively. Furthermore, in women who were older than their husbands, the ORs for cognition of stress and suicidal ideation were 1.32 and 1.41, respectively. These findings support the development of mental health programs and couples' education via national promotions and projects. Managing women's mental health in couples with large age gap groups could contribute to family stability and reduce divorce rates.

Keywords: *Spousal Age Difference, Mental Health, Men, Women, Marital Relationship.*

Introduction

Depression has various causes, and severe depression is a serious chronic disease that can lead to suicide. The number of patients visiting hospitals for depression treatment in Korea has increased by approximately 19.2% from 643,102 in 2016 to 796,364 in 2019, while the related medical expenses, by approximately 7.4% from 258,340,221 won to 277,418,561 won (Health Insurance Review & Assessment Service, 2020). Worldwide, depression ranks second among the top 10 burdens on disability-adjusted life years and may move up to the first position by 2030. In particular, the number of middle-aged (40–59 years old) patients with depression has been increasing annually, with 129,255 in their 50s and 105,884 in their 40s in 2018 (Health Insurance Review & Assessment Service, 2019).

The increase in depression during middle age is mainly due to marital problems. Therefore, most previous studies have primarily explored family-related factors, such as marital satisfaction, marital conflict, family support, and bereavement (Jacobson et al., 2017; Vento & Cobb, 2011). Better spousal relationships are associated with lower depression (Yan et al., 2020), and higher levels of marital satisfaction reinforce emotional support and reduce depression (Vento & Cobb, 2011). Consequently, relationship quality and marital satisfaction influence depression in couples. However, little attention has been paid to the effects of age differences between spouses, which vary across time, culture, country, and ethnicity.

Spousal Age Difference

The magnitude of age difference between spouses varies, with husbands usually being older than their wives (Conroy-Beam & Buss, 2019). In the field of evolutionary behaviour, and more generally, from an economic perspective on marriage, this pattern has long been interpreted as beneficial to both sexes (Gustafson & Fransson, 2015). Men prefer younger women because female youth is closely related to their reproductive value, whereas women prefer older men because men's wealth and social status tend to increase with age (Lawson et al., 2020).

Worldwide, the age difference between spouses is 2–3 years greater than that observed 20–30 years ago,

[1] Department of Nursing, Chung-Ang University, 84, Heukseok-ro, Dongjak-gu, Seoul, Republic of Korea, Email: jisu80@cau.ac.kr.
[2] Department of Nursing, Chung-Ang University, 84, Heukseok-ro, Dongjak-gu, Seoul, Republic of Korea, Phone: +82-2-820-6686, Email: khj1203@cau.ac.kr, (Corresponding Author)

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

with men being older (Buss, 1989). In traditional Korean society (Joseon Dynasty), women were older than their husbands. However, in modern Korean society, men are typically older than their wives, and a common notion prevails that a 4-year gap is optimal. This shift occurred because income tends to increase with age. Because men generally make a greater contribution to household income, an age difference that maximises total household income has been pursued (Rothstein, 2012). However, in recent years, the proportion of wives who are older than their husbands has increased, and the age differences between spouses in Korea and worldwide are diverse.

Studies on Spousal Age Difference

Age has been included as a demographic characteristic in several studies on marriage and family. In general, large age gaps are accompanied by differences in maturity, life experiences, social status, and financial resources, which can make relationships inherently unequal and pose risks to women's health (Luke, 2005). Adebowale (2018) used an unadjusted model to compare the likelihood of intimate partner violence in spouses with varying age differences and found it to be 1.60 and 1.35 times more likely in those with an age difference of 0–4 and 5–9 years, respectively, than in those with an age difference ≥15 years.

Some studies have examined the associations between spousal age difference and variables other than mental health such as women's income (Carollo et al., 2019), contraceptive use (Latifat, 2014), and child mortality (Anafcheh et al., 2018). Carollo et al. (2019) reported that marital age gap is unlikely to be an important determinant of women's income in Denmark. Latifat's (2014) bivariate analyses revealed that women who are <5 or 5–9 years younger than their partner were more likely to use a couple or non-couple contraceptive method than those who are ≥10 years younger. Anafcheh et al. (2018) reported that a spousal age gap of more than five years is among the most critical determinants of having more than one child death per family.

Previous studies have identified various factors related to spousal age differences that might cause conflicts in marital and familial relationships, influencing mental health, including depression. Kim et al. (2015) explored the impact of age difference on depressive symptoms using the data from 2006–2012 of the Korean Longitudinal Study of Aging. They reported that for every additional 1–2 years of spousal age difference, the estimated severity of depressive symptoms increased relative to couples in the same age group. Therefore, spousal age difference should be considered an important factor in mental health. However, few studies have examined the association between spousal age and mental health.

The Present Study

This study aimed to investigate how spousal age differences are related to their mental health, using a nationally representative sample in Asia. We had two primary goals: (1) to examine whether spousal age difference is associated with the recognition of stress, experience of melancholy, diagnosis of depression, and suicidal ideation in both sexes and (2) to explore how much of age difference influences the mental health of both partners.

Methods

Study Design and Population

This study analysed data from the Korean National Health and Nutrition Examination Survey (KNHANES), a cross-sectional, nationally-representative survey conducted by the Korea Centre for Control and Prevention (KCDC) between 2008 and 2012. The survey used a stratified multistage probability sampling design. Each respondent was assigned a weight to obtain an equal probability, allowing the representation of the Korean population. The KNHANES includes health interviews, health behaviour surveys, nutritional surveys, and health examinations.

Of the 45,800 participants enrolled in the KNHANES between 2008 and 2012, those who were aged <19 years (n = 11,141), participated in the study without their spouses (n = 15,548), or had missing mental

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

health variables (n = 2,288) and covariates (n = 1,926) were excluded from the current study. Ultimately, we examined the data of 7,454 couples (14,908 participants who were married and living together) with husbands and wives enrolled in the 2008–2012 KNHANES.

Research Variables

Baseline Characteristics

The following baseline characteristics were recorded: age, sex, education level, household and personal income levels, current economic activity, smoking status, alcohol consumption, and participation in regular exercise. Anthropometric measurements included body mass index (BMI), waist circumference, and the presence of diabetes mellitus, hypertension, and hyperlipidaemia.

Spousal age differences were calculated by subtracting wives' ages from those of their husbands. Then, the differences were classified into <0 years (wife older than husband) or 0-4, 5-9, and ≥10 years (husband older than wife). Educational levels were categorised as 'lower than high school graduation' and 'higher than high school graduation'. Household and personal incomes were classified based on equivalent income (average monthly household income/$\sqrt{\text{number of family members}}$). Lowest 25% values were designated as the first quartile, and those in the subsequent three levels (25% each), as the second, third, and fourth quartiles. Current economic activity was categorised as 'Yes' or 'No' to represent those currently employed or unemployed.

Well-trained examiners performed anthropometric measurements during the study period. Height, waist circumference, and weight were measured to the nearest 0.1 cm and 0.1 kg using a portable stadiometer (Seca 225, Seca, Germany); ruler (Seca 200, Seca, Germany), which was used at the end of exhalation, from the narrowest point between the lower borders of the rib cage and the iliac crest; and calibrated balanced-beam scale (GL-6000-20; G-tech, Seoul, Korea), respectively. The BMI was calculated as weight in kilograms divided by height in meters squared (kg/m^2).

Physical health variables included hypertension and diabetes mellitus. Hypertension was defined as a systolic blood pressure of ≥140 mmHg, a diastolic blood pressure of ≥90 mmHg, or a prescription of hypertension drugs. Diabetes mellitus was defined by a fasting blood sugar of ≥126, prescription of diabetes drugs or insulin, or diagnosis by a doctor.

Mental Health

Mental health variables included stress cognition, experience of melancholy, diagnosis of depression, and suicidal ideation. Cognition of stress was categorised based on the responses of 'Yes' to any of the following: 'I feel stressed very much', 'I feel stressed a lot', and 'I feel stressed a little', or 'No' to 'I hardly feel stressed'. The experience of melancholy was analysed using the question, 'Have you felt sad or depressed for at least two consecutive weeks within the last year, to the extent that it disturbed your daily life?' The participants answered 'Yes' or 'No' to this question. The diagnosis of depression by a doctor was defined as participants responding 'Yes' to the following question: 'Have you ever been diagnosed with depression by a doctor?' Suicidal ideation was assessed using the question, 'Have you thought of committing suicide in the last year?' Participants responded 'Yes' or 'No'.

Statistical Analysis

SAS Survey (ver. 9.3; SAS Institute Inc., Cary, NC, USA) was used to run the complex sample design and ensure appropriate sampling weights and nationally representative estimates. Continuous variables were presented as means and standard errors (SEs), whereas categorical variables, and as percentages and SEs. Analysis of variance (ANOVA) and χ^2 test were used to compare baseline characteristics and mental health variables according to spousal age-difference classifications. Multiple logistic regression analysis was performed to evaluate the associations between mental health variables and spousal age differences in terms

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

of odds ratios (ORs) and 95% confidence intervals (CIs) after adjusting for age, smoking status, alcohol consumption, participation in regular exercise, BMI, and the presence of hypertension, diabetes mellitus, and hyperlipidaemia. The *p* values for trends in mental health variables according to spousal age were calculated. Statistical significance was set at $p < .05$.

Ethical Considerations

This study was exempted from ethical review by the Institutional Review Board of the first author's university (IRB No. 1041078-202009-HR-261-01).

Results

Baseline Characteristics and Mental Health by Sex According to Spousal Age-Difference

Baseline Characteristics

In women, most variables differed significantly by spousal age-difference groups, including age ($p < .001$), educational level ($p < .001$), household income ($p < .001$), personal income ($p = .008$), current economic activity ($p = .001$), smoking status ($p < .001$), BMI ($p < .001$), waist circumference ($p < .001$), and hypertension ($p < .001$) (Table 1). In men, in addition to the same variables, alcohol consumption ($p = .005$) and diabetes mellitus ($p < .001$) differed significantly by the groups; however, waist circumference did not differ (Table 1).

Table 1. Baseline characteristics and mental health by sex according to spousal age difference (N = 14,908).

Variable	Age difference classification (husband's age - wife's age in years) <0* (n = 568) Mean ± SE, % (SE)	0–4 (n = 4,624)	5–9 (n = 2,027)	≥10 (n = 235)	*p*
Women					
Age (years)	47.1 5 ± 0.60	46.54 ± 0.25	48.41 ± 0.34	45.32 ± 0.95	<.001
Educational level (≥ high school)	68.98 (2.39)	70.08 (0.93)	55.96 (1.33)	40.76 (3.77)	<.001
Household income (highest Q4)	27.14 (2.18)	32.33 (0.96)	27.80 (1.18)	20.90 (3.67)	<.001
Current economic activity (yes)	49.11 (2.57)	50.46 (0.92)	56.48 (1.35)	55.31 (3.96)	.001
Current smoker (yes)	8.35 (1.45)	2.82 (0.30)	4.32 (0.59)	6.30 (2.06)	<.001
Body mass index (kg/㎡)	23.47 ± 0.17	23.41 ± 0.06	23.86 ± 0.09	24.06 ± 0.29	<.001
Waist circumference (cm)	78.67 ± 0.45	78.5 ± 0.19	79.82 ± 0.27	80.47 ± 0.85	<.001
Hypertension (yes)	23.73 (2.29)	21.4(0.75)	27.23 (1.20)	19.46 (2.91)	<.001
Diabetes mellitus (yes)	7.19 (1.28)	6.55(0.44)	8.15 (0.70)	7.87 (1.82)	.219
Cognition of stress (yes)	35.90 (2.32)	27.63 (0.74)	26.37 (1.21)	40.46 (4.05)	<.001
Experience of melancholy (yes)	15.55 (1.75)	14.85 (0.61)	15.38 (0.92)	23.96 (3.22)	.012
Diagnosis of depression (yes)	5.69 (1.23)	5.24 (0.39)	6.34 (0.67)	11.09 (2.47)	.019
Suicidal ideation (yes)	20.26 (1.97)	15.12 (0.62)	16.72 (1.04)	23.52 (3.46)	.003
Men					
Age (years)	43.39 ± 0.53	47.04 ± 0.23	52.78 ± 0.33	55.43 ± 0.88	<.001

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

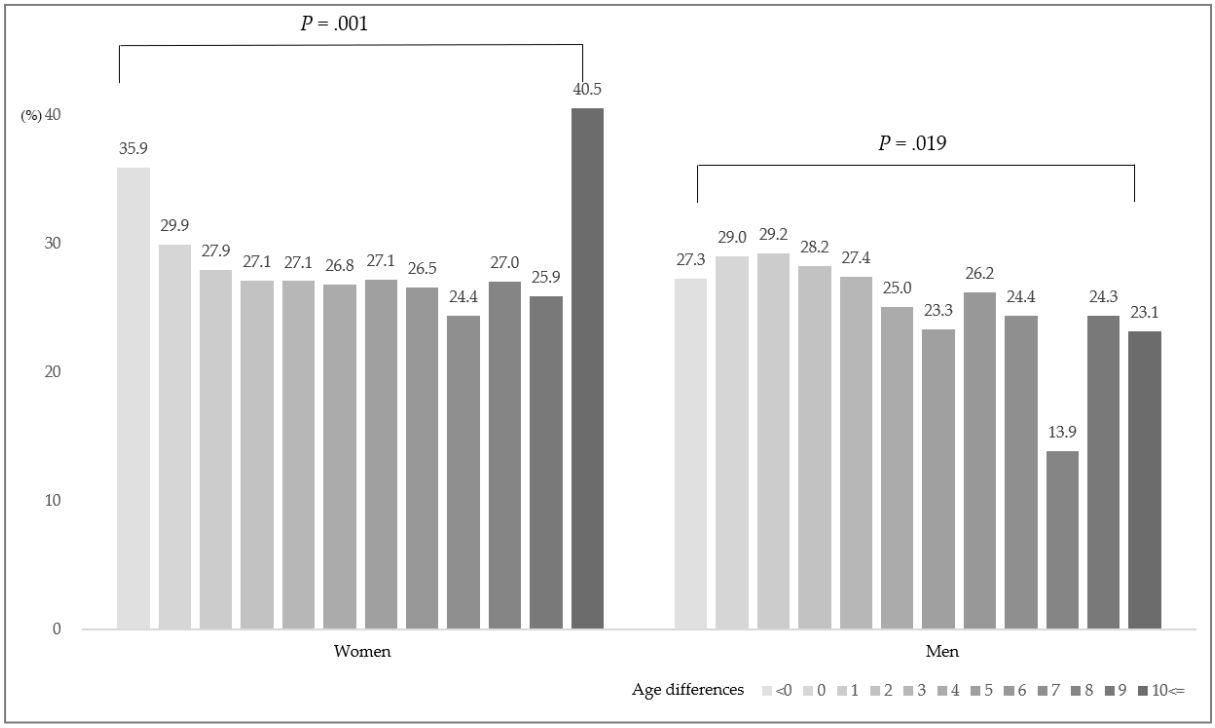
Educational level (≥ high school)	76.83 (2.26)	79.85 (0.74)	67.11 (1.21)	57.64 (4.00)	<.001
Household income (highest Q4)	27.69 (2.20)	33.48 (1.00)	28.95 (1.26)	20.83 (3.48)	<.001
Current economic activity (yes)	92.26 (1.15)	89.65 (0.47)	83.89 (0.92)	76.45 (3.01)	<.001
Current smoker (yes)	55.32 (2.51)	43.81 (0.85)	41.26 (1.33)	39.01 (3.84)	<.001
Body mass index (kg/㎡)	24.34 ± 0.17	24.39 ± 0.06	23.94 ± 0.08	23.98 ± 0.22	<.001
Waist circumference (cm)	84.68 ± 0.47	85.24 ± 0.16	84.59 ± 0.23	84.49 ± 0.68	.066
Hypertension (yes)	31.52 (2.49)	32.23 (0.86)	38.43 (1.26)	33.82 (3.64)	<.001
Diabetes mellitus (yes)	6.38 (1.11)	10.06 (0.52)	13.61 (0.87)	17.97 (3.17)	<.001
Cognition of stress (yes)	27.27 (2.35)	27.70 (0.81)	23.23 (1.12)	23.14 (3.53)	.020
Experience of melancholy (yes)	8.47 (1.40)	8.59 (0.49)	8.14 (0.68)	5.63 (1.47)	.599
Diagnosis of depression (yes)	1.94 (0.64)	1.25 (0.19)	1.38 (0.31)	1.33 (1.10)	.704
Suicidal ideation (yes)	10.12 (1.53)	8.34 (0.49)	10.19 (0.78)	10.64 (2.19)	.126

Note: *<0 indicates that the wife is older than the husband.

Mental Health

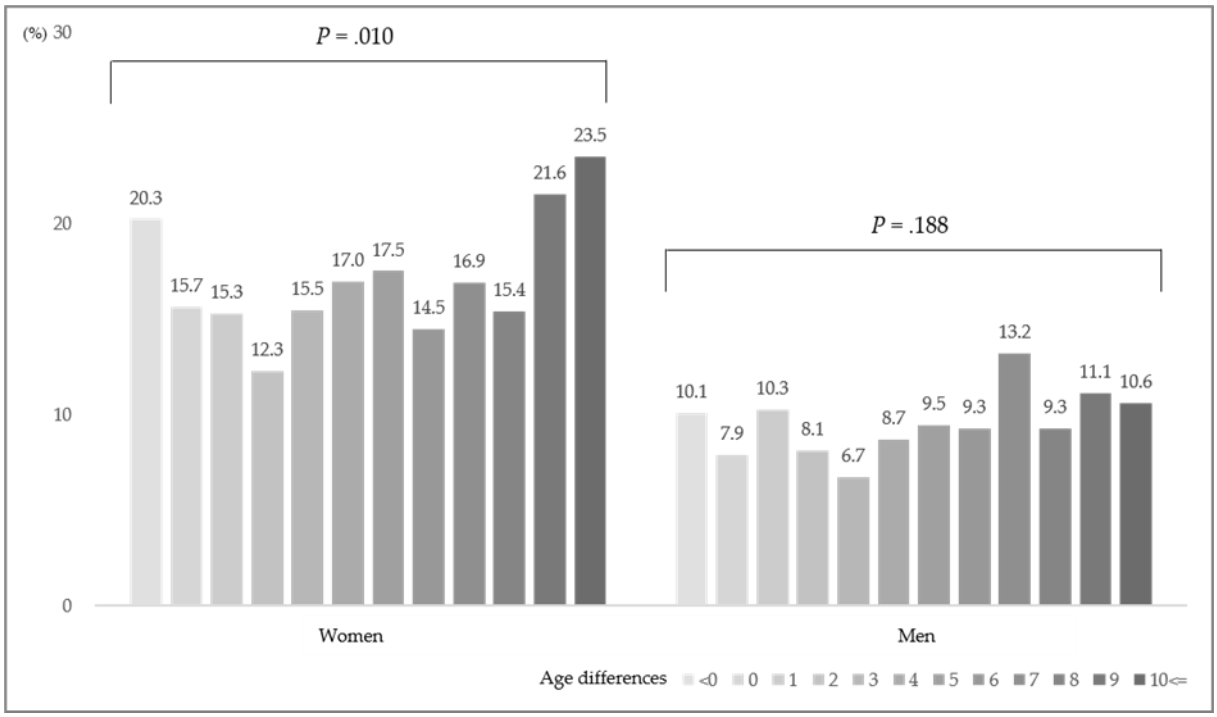
In women, all mental-health variables including cognition of stress ($p < .001$), experience of melancholy ($p = .012$), diagnosis of depression ($p = .019$), and suicidal ideation ($p = .003$) differed significantly by age-difference groups. In men, only cognition of stress ($p = .020$) differed significantly. Specifically, only in women, as spousal age differences increased, the cognition of stress ($p = .001$) and suicidal ideation ($p = .010$) tended to increase (Figures 1 and 2, respectively).

Figure 1. Cognition of stress according to age difference by sex (N=14,908).



Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

Figure 2. Suicidal ideation according to age difference by sex (N=14,908).



Association Between Mental Health and Spousal Age Difference According to Sex

In the logistic regression model, after adjusting for age, smoking status, alcohol consumption, regular exercise, BMI, hypertension, diabetes mellitus, and hyperlipidaemia (Table 2), women exhibited significantly stronger associations between mental health variables and age differences. Specifically, with the 0–4-years group as the reference, the ORs for cognition of stress were 1.41 and 1.72 for women in <0 (wife older than husband) and ≥10 years groups, respectively (Table 2). Additionally, the ORs for the experience of melancholy and diagnosis of depression were 1.77 and 2.24, respectively, in women with age differences of ≥10 years. Suicidal ideation had ORs of 1.32 and 1.69 in women with age differences of <0 and ≥10 years, respectively (Table 2).

Table 2. Association between mental health and spousal age differences according to sex (N = 14,908).

Variable	Age difference classifications (husbands' age-wives' age) OR (95% CI)				
	<0 (n = 568)	0–4 (n = 4,624)	5–9 (n = 2,027)	≥10 (n = 235)	*for trend*
Women					
Cognition of Stress	1.41 (1.14,1.74)	1 (Reference)	0.92 (0.80, 1.06)	1.72 (1.22, 2.41)	.001
Experience of melancholy	0.99 (0.74, 1.32)	1	0.99 (0.84, 1.17)	1.77 (1.21, 2.59)	030
Diagnosis of depression	1.01 (0.62, 1.65)	1	1.15 (0.88, 1.51)	2.24 (1.35, 3.73)	019
Suicidal ideation	1.32 (1.01, 1.73)	1	1.06 (0.89, 1.26)	1.69 (1.14, 2.50)	014
Men					

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

Cognition of Stress	0.85 (0.66, 1.08)	1 (Reference)	0.93 (0.80, 1.50)	1.02 (0.68, 1.52)	511
Experience of melancholy	1.03 (0.71, 1.50)	1	0.86 (0.68, 1.10)	0.54 (0.31, 0.95)	113
Diagnosis of depression	1.73 (0.83, 3.60)	1	0.91 (0.52, 1.60)	0.81 (0.15, 4.41)	459
Suicidal ideation	1.30 (0.91, 1.86)	1	1.10 (0.90, 1.31)	1.02 (0.63, 1.65)	523

Note: OR = odds ratio; CI = confidential interval.

Adjusted for age, current smoking, heavy drinking, regular exercise, body mass index, prevalence of hypertension, diabetes mellitus, and hyperlipidaemia.

Discussion

This study examined the association between age difference in couples and their mental health. The findings can be used to distinguish between the perspectives of men and women.

Regarding differences in baseline characteristics (e.g. demographics, lifestyle, and physical health), the average age of women reporting mental health issues was the lowest in those who were 10 years younger than their husbands, while that of men was the highest at 55.43 years (Table 1). In addition, educational level, household income, and personal income trended lower among both men and women in the group in which husbands were ≥10 years older than their wives. These patterns are consistent with those of a study conducted in Sweden, in which lower spousal age differences were associated with higher educational levels in both women and men (Gustafson & Fransson, 2015).

Differences in spousal age affect women's mental health. The cognition of stress (40.46%), experience of melancholy (23.96%), diagnosis of depression (11.09%), and suicidal ideation (23.52%) were all highest when wives were ≥10 years younger than their husbands, followed by when wives were older. Men showed a difference in stress cognition but not in other factors. A study in the United States identified depressive symptoms among older spouses (Pradeep & Sutin, 2015) and found that the symptoms increased in both men and women with young spouses. Although this pattern differs from our findings, it is consistent with previous results showing depression in older couples. Together, these data suggest that a greater spousal age difference exerts a negative influence on wives' mental health. In addition, women who were ≥10 years older than their husbands had more mental health problems compared to those who were 0–4 or 5–9 years older.

When wives were older than their husbands and when husbands were ≥10 years older than their wives, women's cognition of stress (p = .001) and suicidal ideation (p = .010) increased and showed a U shape (Figures 1 and 2, respectively). In other words, women in these types of relationships have poor mental health. Table 2 shows poor mental health in these two groups and the increase in risk relative to that in the group with an age difference of 0–4 years.

Moreover, in women who were ≥10 years younger than their husbands, the ORs for cognition of stress, experience of melancholy, diagnosis of depression, and suicidal ideation were higher than those of men, which indicates a negative influence on women's mental health.

Furthermore, when husbands were ≥10 years older than their wives, cognition of stress, diagnosis of depression, and suicidal ideation were nonsignificant, but the OR for the experience of melancholy was 0.54, indicating that ORs for men decreased. This result is consistent with that of a previous study (Yan et al., 2020), suggesting that the association between marital relationships and depression is stronger in women than in men.

This finding may originate from the patriarchal tendencies of underestimating women and not considering them as equal when there is a significant age difference. Korean society, which is based on traditional

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

Confucian ideology, plays the most crucial role in reinforcing age hierarchy and requires politeness despite minimal age differences. Therefore, the greater the age difference between the couple (especially if the man is older), the more unequal the relationship and the more likely the husband is to look down on his wife. Until a few decades ago, male children were preferred in Korean society, and women were expected to endure even if their status or rights were ignored. However, as women's social advancement became more prominent and their social status and rights increased, more women considered themselves to have an equal footing in marital relationships, regardless of age. They find it difficult to tolerate a husband who underestimates them because of age differences; this separation, originating from social and domestic perspectives, can increase the cognition of stress, which can aggravate depression and even lead to suicidal ideation.

Women who were older than their spouses had higher cognition of stress and experienced suicidal ideation, likely because they had higher social and economic status and educational levels (Sung & Jo, 2010). A greater number of women are becoming economically independent, and some men may prefer older women to reduce their financial burden. However, in Korean society, negative views and prejudices remain strong against couples if the woman is older; they often marry despite parental opposition and fail to overcome difficulties and the generation gap (Shin & Park, 2018). This may also explain why the ORs for cognition of stress and experience of suicidal ideation were higher among women who were older partners.

The greater the spousal age difference or the wife's age, the poorer the mental health of the women, which may be a factor in low marital satisfaction and high divorce rates. A study in the United States on marriage duration found that spousal age difference was positively correlated with the divorce rate: in couples with an age difference of one year, the chance of divorce was 3% higher than that in same-age couples; in those with a 5-year age gap, the probability of divorce was 18% higher; and in those with a 10-year gap, it was 39% higher (Francis-Tan & Mialon, 2015). Another study found that the severity of depressive symptoms among those with poor marital relationships was stronger than that among those with higher marital satisfaction (Karney & Bradbury, 2020). Combined with our findings, these data indicate that managing women's mental health in couples with large age differences may improve marital satisfaction and reduce divorce rates.

Therefore, for couples with a greater age difference (husbands ≥10 years older than wives) and for those in which the wife's age is higher, treating each other as equals is essential to prevent poorer mental health in women. Equal treatment would help maintain mental health by developing common interests and increasing communication while acknowledging the generation gap due to age differences. Active communication can help couples recognise each other's needs and solve problems, whereas negative communication can adversely affect marital satisfaction and even cause depression (Barry et al., 2019; Barton et al., 2017; Delaney & Sharabi, 2020; Kiełek-Rataj et al., 2020). A lack of communication is particularly linked to depression in women (Zaheri et al., 2016; Lavner et al., 2016; Yan et al., 2020). The results of this study suggest that poor mental health among wives whose husbands are ≥10 years older may also be due to a lack of communication. Therefore, even if the spousal age difference is large, positive conversations from an equal standpoint may improve women's mental health, increase their marital satisfaction, and reduce divorce rates.

This study has a notable limitation in that it was cross-sectional and based on questionnaires. This prevented us from accurately determining prevalence and causality. However, the fact that this study was based on a national survey of adult couples in Korea is meaningful for informing national health projects and policymakers.

Conclusions

This study revealed a strong association between spousal age differences and women's overall mental health, cognition of stress, experience of melancholy, diagnosis of depression, and experience of suicidal ideation. Among wives who were older than their husbands, stress cognition and the experience of suicidal ideation increased. Thus, managing the mental health of women who are older or younger than their partners in a

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

relationship may help reduce medical expenses due to depression-related diseases, increase marital satisfaction, and decrease divorce rates. Mental health and educational programs for couples should be developed as part of the national public health projects. An interesting direction for future research would be to investigate whether differences in spousal age influence children's mental health.

Funding: This study received no external funding.

Conflicts of Interest: The authors declare no conflicts of interest.

References

Adebowale, A. S. (2018). Spousal age difference and associated predictors of intimate partner violence in Nigeria. BMC Public Health, 18(1), 1–15. https://doi.org/10.1186/s12889-018-5118-1

Anafcheh, T., Yaghoubi Doust, M., Mojadam, M., Mirkazemi, R., & Khafaie, M. A. (2018). Temporal and spatial distribution of under-five mortality and factors associated with multiple cases of under-five deaths within a family in the rural area of Khuzestan, Southern Iran. Scientific Reports, 8(1), 1–8. https://doi.org/10.1038/s41598-018-36438-5

Barry, R. A., Barden, E. P., & Dubac, C. (2019). Pulling away: links among disengaged couple communication, relationship distress, and depressive symptoms. Journal of Family Psychology, 33(3), 280–293. https://doi.org/10.1037/fam0000507

Barton, A. W., Beach, S. R. H., Lavner, J. A., Bryant, C. M., Kogan, S. M., & Brody, G. H. (2017). Is communication a mechanism of relationship education effects among rural African Americans? Journal of Marriage and Family, 79(5), 1450–1461. https://doi.org/10.1111/jomf.12416

Buss, D. M. (1989). Sex differences in human mate preferences: evolutionary hypotheses tested in 37 cultures. Behavioral and Brain Sciences, 12(1), 1–14. https://doi.org/10.1017/S0140525X00023992

Carollo, A., Oksuzyan, A., Drefahl, S., Giovanni Camarda, C., Juel Ahrenfeldt, L., Christense, K., & van Raalte, A. (2019). Is the age difference between partners related to women's earnings? Demographic Research, 41(15), 425–460. https://www.demographic-research.org/Volumes/Vol41/15/

Conroy-Beam, D., & Buss, D. M. (2019). Why is age so important in human mating? Evolved age preferences and their influences on multiple mating behaviors. Evolutionary Behavioral Sciences, 13(2), 127–157. https://doi.org/10.1037/ebs0000127

Danel, D. P., Dziedzic-Danel, A., & Kleisner, K. (2016). Does age difference really matter? Facial markers of biological quality and age difference between husband and wife. Journal of Comparative Human Biology, 67(4), 337–347. https://doi.org/10.1016/j.jchb.2016.05.002

Delaney, A. L., & Sharabi, L. L. (2020). Relational uncertainty and interference from a partner as predictors of demand/withdraw in couples with depressive symptoms. Western Journal of Communication, 84(1), 58–78. https://doi.org/10.1080/10570314.2019.1635266

Francis-Tan, A., & Mialon, H. M. (2015). "A diamond is forever" and other fairy tales: the relationship between wedding expenses and marriage duration. Economic Inquiry, 53(4), 1919–1930. https://doi.org/10.1111/ecin.12206

Gustafson, P., & Fransson, U. (2015). Age differences between spouses: sociodemographic variation and selection. Marriage & Family Review, 51(7), 610–632. https://doi.org/10.1080/01494929.2015.1060289

Health Insurance Review & Assessment Service. (2020). National Interest Disease Statistics: Depression. http://opendata.hira.or.kr/op/opc/olapMfrnIntrsIlnsInfo.do

Health Insurance Review & Assessment Service. (2019). National Interest Disease Statistics: Depression. http://opendata.hira.or.kr/op/opc/olapMfrnIntrsIlnsInfo.do

Jacobson, N. C., Lord, K. A., & Newman, M. G. (2017). Perceived emotional social support in bereaved spouses mediates the relationship between anxiety and depression. Journal of Affective Disorders, 211, 83–91. https://doi.org/10.1016/j.jad.2017.01.011

Karney, B. R., & Bradbury, T. N. (2020). Research on marital satisfaction and stability in the 2010s: challenging conventional wisdom. Journal of Marriage and Family, 82(1), 100–116. https://doi.org/10.1111/jomf.12635

Kiełek-Rataj, E., Wendołowska, A., Kalus, A., & Czyżowska, D. (2020). Openness and communication effects on relationship satisfaction in women experiencing infertility or miscarriage: a dyadic approach. International Journal of Environmental Research and Public Health, 17(16), 5721. https://doi.org/10.3390/ijerph17165721

Kim, J. H., Park, E. C., & Lee, S. G. (2015). The impact of age differences in couples on depressive symptoms: evidence from the Korean longitudinal study of aging (2006–2012). BMC Psychiatry, 15(1), 1–9. https://doi.org/10.1186/s12888-015-0388-y

Latifat, I. (2014). Is age difference between partners associated with contraceptive use among married couples in Nigeria? International Perspectives on Sexual and Reproductive Health, 40(1), 39–45. https://doi.org/10.1363/4003914

Lavner, J. A., Karney, B. R., & Bradbury, T. N. (2016). Does couples' communication predict marital satisfaction, or does marital satisfaction predict communication? Journal of Marriage and Family, 78(3), 680–694. https://doi.org/10.1111/jomf.12301

Lawson, D. W., Schaffnit, S. B., Hassan, A., & Urassa, M. (2020). Shared interests or sexual conflict? Spousal age gap, women's wellbeing and fertility in rural Tanzania. Evolution and Human Behavior, 42(2), 165–175. https://doi.org/10.1016/j.evolhumbehav.2020.08.009

Luke, N. (2005). Confronting the 'sugar daddy' stereotype: age and economic asymmetries and risky sexual behavior in urban Kenya. International Family Planning Perspectives, 31(1), 6–14. https://doi.org/10.1363/3100605

Journal of Ecohumanism
2024
Volume: 3, No: 3, pp. 1479 – 1488
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i3.3602

Pradeep, N., & Sutin, A. R. (2015). Spouses and depressive symptoms in older adulthood. Scientific Reports, *5*, 8594. https://doi.org/10.1038/srep08594

Rothstein, B. (2012). The reproduction of gender inequality in Sweden: a causal mechanism approach. Gender, Work and Organization, 19(3), 324–344. https://doi.org/10.1111/j.1468-0432.2010.00517.x

Shin, Y. J., & Park, S. (2018). Changes in spouses' educational pairings and marriage behavior. Health and Social Welfare Review, 38(4), 431–464. https://doi.org/10.15709/hswr.2018.38.4.431

Sung, N., & Jo, D. (2010). Wife-older marriage and economic factors: empirical analysis. Korea Journal of Population Studies, 33(3), 1–30.

Vento, P. W. P. D., & Cobb, R. J. (2011). Chronic stress as a moderator of the association between depressive symptoms and marital satisfaction. Journal of Social and Clinical Psychology, 30(9), 905–936. https://doi.org/10.1521/jscp.2011.30.9.905

Yan, J. J., Schoppe-Sullivan, S. J., & Feng, X. (2020). Transactional associations between couple relationship intimacy and depressive symptoms across 10 years. Journal of Marriage and Family, 82(4), 1197–1212. https://doi.org/10.1111/jomf.12667

Zaheri, F., Dolatian, M., Shariati, M., Simbar, M., Ebadi, A., & Azghadi, S. B. (2016). Effective factors in marital satisfaction in perspective of Iranian women and men: a systematic review. Electronic Physician, 8(12), 3369–3377. https://doi.org/10.19082/3369.