1957





Participant Report

20<u>25</u>



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# A NOTE FROM THE RESEARCHERS

Dear friends of the WLS,

As we prepared this report for you, we reflected on the enormous breadth and depth of the Wisconsin Longitudinal Survey. As the study timeline (p.8 & 9) shows, the WLS has covered extensive ground over the years. When members of the Class of 1957 answered that first questionnaire 68 years ago, they provided valuable information about their educational plans and aspirations. Later – with help from the graduates' parents – UW-Madison researchers asked the graduates about their subsequent schooling and employment. Along the way, the study also recruited the graduates' siblings and spouses, and asked more questions about family life, social relationships, civic participation, and a range of other ways in which folks engaged with their communities. In the 1990s, the WLS started asking about health, and in the early 2000s, we asked about retirement. In the most recent decades, we have learned a lot about participants physical, mental, and cognitive health. Researchers in Wisconsin and beyond are using information about the full life course to understand the many complex and interacting factors that help influence both risks and resilience at older ages.

In this report, you'll find a sampling of recent findings from these studies. The studies consider the impact of relationships with siblings, friends, and romantic partners on mental health and cognitive function in later life. They also document the implications of various health-related exposures (for example, hormone replacement therapy) for subsequent health. Finally, some studies employ the life-long data of WLS participants to consider the impacts of government policies (specifically, New Deal spending) on well-being in later life. Together, these studies showcase the broad range of topics and fields the information you share contributes to, and to the unparalleled opportunities the WLS offers for answering thorny substantive and methodological questions that few other studies can address. More examples of research featuring data from the WLS are available on our website: https://participants.wls.wisc.edu/

Since our last report, we have maintained and deepened the collaboration between the WLS team, the UW Survey Center, and the UW-Madison School of Medicine and Public Health (SMPH). As many of you have recently experienced, we are currently "in the field," collecting new data on memory and brain health via telephone and inperson interviews. Many of you have also graciously agreed to provide blood samples, which our research team is using to develop and test blood-based measures of cognitive health. And some of you are also visiting our clinic at the SMPH for a more extensive set of assessments, including brain imaging, that help us validate and refine the blood-based metrics.

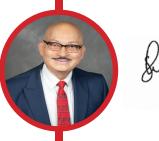
These new and highly valuable data are allowing researchers to answer many scientific questions that will, in the long term, contribute to the ability of clinicians to evaluate brain health, make cognitive diagnoses, and understand the factors that shape disease risk and resilience as well as response to potential treatments.

None of this would be possible without your ongoing commitment to this one-of-a-kind study. We are extremely grateful for all the time you've spent with us, and truly appreciate your continued support. We always love hearing from you, and have been very pleased to receive messages from many participants and family members who tell us about how much participating in the WLS has meant to them. If you would like to share your thoughts about your experience with this life-long study – please don't hesitate to reach out.





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# SOCIAL SUPPORT FROM FAMILY AND FRIENDS, EDUCATIONAL ATTAINMENT, AND COGNITIVE FUNCTION

EDUCATIONAL ATTAINMENT, PERCEIVED SUPPORT, AND COGNITIVE FUNCTION

Using survey data from WLS sibling pairs in 2011 and in 2020, researchers examined the role that educational attainment plays in the relationship between social support from family and friends, and changes in older adults' cognitive function. Researchers found that greater levels of perceived support (i.e., having friends or family who can address potential needs such as lending money, talking about personal problems, or taking care of you when you are sick) were associated with better cognitive function. While greater levels of perceived support from family was related to better cognitive function, results indicated that this effect decreased as educational attainment increased. According to the researchers: "The association between perceived support and cognitive function differs based on educational attainment gives interventionists additional information needed to identify groups of older adults most susceptible to cognitive impairment."

Moorman, S. M., & Pai, M. (2024). Social Support From Family and Friends, Educational Attainment, and Cognitive Function. Journal of Applied Gerontology, 43(4), 396-401. https://doi.org/10.1177/07334648231203840

# EXAMINING THE LONGITUDINAL BI-DIRECTIONAL ASSOCIATIONS OF FRIEND ENGAGEMENT, SOCIAL FUNCTIONING, AND DEPRESSION

EVIDENCE THAT FRIENDSHIPS AND SOCIALIZING KEEP US HAPPY IN THE LONGTERM

The unique longitudinal data in the WLS allowed researchers to investigate the associations between depressive symptoms, friend engagement, and social functioning. Researchers found that, across a period of about thirty years, people who reported more frequent engagement with friends and better social functioning, also reported fewer depressive symptoms. The researchers demonstrated that the relationships between social factors and depression are apparent across large time intervals. According to the researchers these findings add further support to the importance of social life and its influence on mental health. Future research could build on these findings by examining the characteristics of the friendship interactions.

Anderson, A. R., & Lastrapes, M. (2024). Examining the Longitudinal Bi-Directional Associations of Friend Engagement, Social Functioning, and Depression. Psychological Reports, 0(0). https://doi.org/10.1177/00332941241241632

# MASCULINE IDEALS AND HEALTH IN OLDER MEN: FINDINGS FROM THE WISCONSIN LONGITUDINAL STUDY

HOW DO TRADITIONAL MASCULINE IDEALS AND ACTIVITIES AFFECT OLDER MEN'S HEALTH?

Authors used WLS data to investigate how upholding traditional masculine ideals and participating in masculine activities inform older men's self-rated health, chronic illness, and mental health. The authors built on existing research that identifies common masculine traits such as self-

reliance, endurance, strength, virility, and competitiveness, all of which, when upheld, can be detrimental and lead to behaviors that put undue stress on men.

Findings
suggest that
greater
endorsement
of traditional
masculine ideals
is associated
with worse selfrated health.

Study findings suggest that greater endorsement of traditional masculine

ideals is associated with worse self-rated health, greater chronic illness morbidities, and depression in older men. While participating on sports teams and hunting or fishing was not associated with specific health outcomes, the authors found that doing repairs and car maintenance was associated with less chronic illness and depression in older men.

Burns SD, Drentea P. Masculine Ideals and Health in Older Men: Findings From the Wisconsin Longitudinal Study. American Journal of Men's Health. 2023;17(6). doi:10.1177/15579883231220714



# LIVING APART TOGETHER AND DEPRESSIVE SYMPTOMS IN OLDER ADULTHOOD

RESEARCHERS CONTINUE THEIR EXAMINATION OF "LAT" RELATIONSHIPS

Building on their previous study on WLS participants' experiences of being in "living apart, together" (LAT) relationships, researchers assessed how this type of relationship – one where romantic partners are not cohabiting or married – might be related to psychological well-being in later life. Results showed that the well-being of men and women in LAT relationships was no different from either cohabiting or married adults.

Wu, H., & Brown, S. L. (2024). Living Apart Together and Depressive Symptoms in Older Adulthood. Marriage & Family Review, 60(2), 109–132. https://doi.org/10.1080/01494929.20 24.2312371

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This timeline highlights key moments in the long history of the Wisconsin Longitudinal Study (WLS), from its beginnings in 1957 through today. It shows how participation — as a graduate, sibling, or spouse — has helped shape decades of meaningful research on health, family, and aging.

### Postcard to Parents

Parents of 1/3 sample of Graduates

Dr. William Sewel, being a parent himself, knew the best way to learn about the kids who filled out the 1957 questionnaire would be to talk to their parents.

# **Telephone Survey**

2,000 Selected Siblings This survey was a pilot of whether or not the Sibs would be interested in talking to us. The focus was on occupation and differences between families and within families.

## Mail Survey Graduates

We started mailing a paper survey to avoid making the telephone interview longer. Topics included self-reported health and work-family balance.

1994

Telephone & Mail Survey

All Siblings

# Multi-mode data collection

80% of Grads & Sibs This is the beginning of two successive rounds of data collection funded by the National Institutes of Health (NIH) with the largest grant to WLS to date. It is also the beginning of a partnership with Dr. Sanjay Asthana at the University and our largest survey to of Wisconsin School of Medicine and Public Health.



### Multi-mode

80% of Grads & Sibs Participation of both Grads and Sibs is going strong and on behalf of all WLS researchers, we could not be more appreciative!



1964





1993



Telephone &

Mail Surveys

Our first time

date at 54 pages!

Spouses

Graduates, Siblings, &

interviewing spouses,

2003-2007



2019



2025

**Spring 1957** 



"My Plans Beyond High School"

All high school seniors in Wisconsin The UW-Madison School of Education surveys educational plans to help the state prepare for the growing demand for higher education.

1975



**Telephone Survey** Graduates

Our first time talking to Grads, and laying the groundwork for adding a Sibling.

1992



**Telephone Survey** Graduates

Still a focus on education and occupation but the first round where scholars interested in other topics contributed questions.

2010-2011



In-Person, Telephone & Mail Grads and Sibs

Our first in-person interview! This allowed for the collection of physical measures. The paper survey increased to 72 pages - thank you for your time filling it out!

2023



Multi-mode

80% of Grads & Sibs This marks the renewal of NIH funding, exceeding the size of the previous grant to break a new record for WLS.

2027



Multi-mode

80% of Grads & Sibs If funding holds, we plan to continue the current data collection efforts until at least 2028.

# PARTICIPATORY AND RECEPTIVE ARTS ENGAGEMENT IN OLDER ADULTS: ASSOCIATIONS WITH COGNITION OVER A SEVEN-YEAR PERIOD

### THE POSITIVE BENEFITS OF ENGAGEMENT WITH THE ARTS

Enjoyment of the arts in many forms is not only fun, but may also be beneficial for cognitive health. Recent research using the WLS data examined the relationship between engagement with the arts and changes in cognition over a seven-year period. Findings show some evidence that engagement in both participatory activities (e.g., painting, drawing, playing an instrument, or hobbies) and receptive activities (e.g., lectures, concerts, plays, films, or going to the museum) are associated with better executive function and language skills. According to the researchers "engaging in receptive arts activities for up to three hours per week (but not more frequently) was associated with better subsequent episodic/working memory. These effects were of similar sizes to doing vigorous physical activity for up to one hour per week."

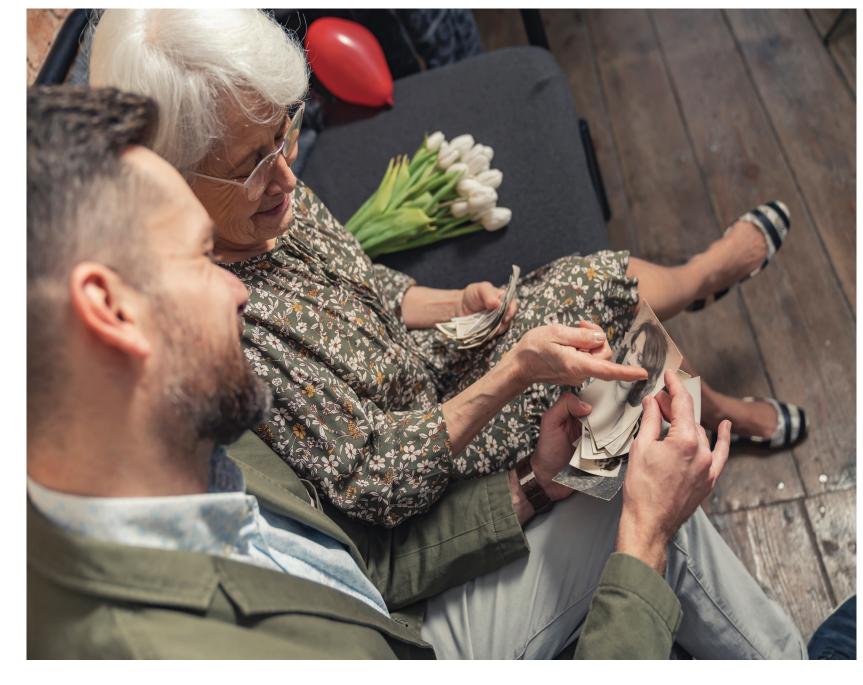
Bone, J. K., Fancourt, D., Sonke, J. K., & Bu, F. (2023). Participatory and Receptive Arts Engagement in Older Adults: Associations with Cognition Over a Seven-Year Period. Creativity Research Journal, 36(3), 436–450. https://doi.org/10.1080/10400419.2023.2247241

# LIFE COURSE ASSOCIATIONS OF SIBLING RELATIONSHIPS AND COGNITIVE FUNCTIONING IN LATE ADULTHOOD

### BENEFITS OF POSITIVE SIBLING RELATIONSHIPS

The unique features of the WLS data allowed researchers to examine the lifelong associations of sibling relationships and their effects on cognitive functioning in late adulthood. Using data from the sibling cohort of the WLS, this study looked at the effects of childhood sibling interactions and adverse childhood experiences (ACEs) on cognitive functioning in late adulthood through adult sibling closeness and contact. Positive childhood sibling interactions (e.g., hugging, helping) were associated with increased adult sibling closeness and contact, whereas higher cumulative ACEs were associated with decreased adult sibling closeness and contact. According to the researchers "The results suggest that childhood experiences within the family of origin may have lasting effects on adult sibling relationships and the cognitive functioning of older adults. This study highlights the potential cognitive benefits of frequent contact with adult siblings, underscoring the importance of nurturing sibling relationships throughout one's life."

Jooyoung Kong, Sara M Moorman, Gina Lee, Michal Engelman, Life Course Associations of Sibling Relationships and Cognitive Functioning in Late Adulthood, The Journals of Gerontology: Series B, Volume 80, Issue 1, January 2025, gbae191, https://doi.org/10.1093/geronb/gbae191

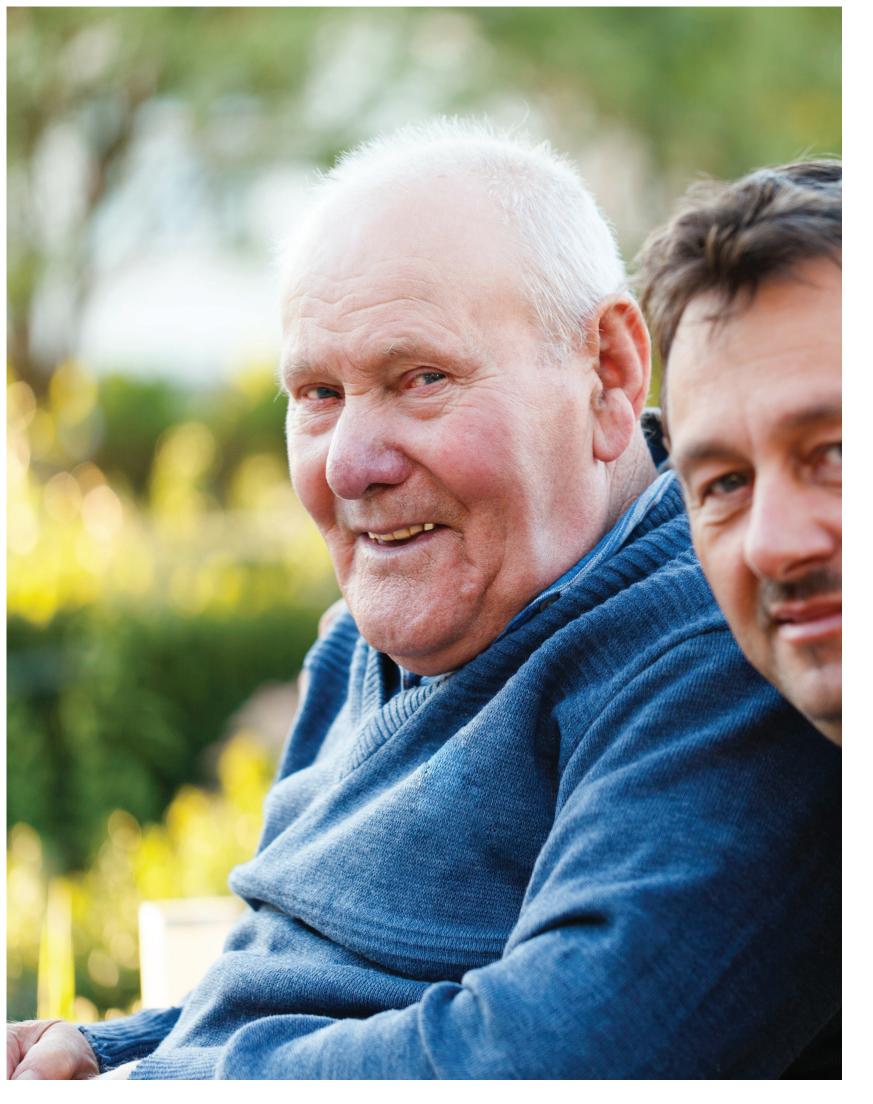


# ASSOCIATIONS BETWEEN MIDLIFE MENOPAUSAL HORMONE THERAPY USE, INCIDENT DIABETES, AND LATE LIFE MEMORY IN THE WLS

UNEXPECTED COGNITIVE AND HEALTH BENEFITS OF MENOPAUSAL HORMONE THERAPY (MHT)

Results from a recent analysis of WLS data demonstrated that midlife (mean age of 64) menopausal hormone therapy (MHT) use was associated with better late life (mean age of 71) performance on immediate word list recall, and a reduced risk of diabetes. This research supports MHT use in midlife as protective against late life cognitive decline and adverse health outcomes.

Williams VJ, Koscik R, Sicinski K, Johnson SC, Herd P, Asthana S. Associations Between Midlife Menopausal Hormone Therapy Use, Incident Diabetes, and Late Life Memory in the Wisconsin Longitudinal Study. Journal of Alzheimer's Disease. 2023;93(2):727-741. doi:10.3233/JAD-221240



# THE ASSOCIATION BETWEEN COGNITIVE ABILITY AND BODY MASS INDEX: A SIBLING-COMPARISON ANALYSIS IN FOUR LONGITUDINAL STUDIES

WLS SIBLING DATA HELPS ADDRESS LIMITATIONS AND BIAS IN EXISTING RESEARCH

Researchers questioned whether existing studies that report links between cognitive ability and obesity may be biased and limited in design. WLS sibling data gave researchers the unique opportunity to examine the association between childhood cognitive ability and body mass index (BMI) within families, potentially accounting for unobserved factors such as family socioeconomic position. The results gave little evidence to support the association between higher cognitive ability and lower BMI, contrary to results from previous studies. The authors suggest that sibling data may be useful for assessing potential bias in future studies about cognitive ability and health outcomes.

Wright L, Davies NM, Bann D (2023) The association between cognitive ability and body mass index: A sibling-comparison analysis in four longitudinal studies. PLoS Med 20(4): e1004207. https://doi.org/10.1371/journal.pmed.1004207

# LONG-TERM EFFECTS OF LOCAL AREA NEW DEAL WORK RELIEF IN CHILDHOOD ON LATE LIFE DEPRESSION

WLS DATA HIGHLIGHTS LONG-TERM MENTAL HEALTH BENEFITS OF NEW DEAL POLICIES

Authors investigated the relationship between childhood exposure to local area New

Deal emergency employment work relief activity and depressive symptoms in late life. Findings showed that children who lived in neighborhoods with moderate to high levels of emergency work relief activity exhibited 14-18% lower depressive symptom scores at ages 72-74, illustrating how economic policies aimed at supporting vulnerable communities can lead to better health outcomes. According to the researchers "these results suggest social policies aimed at maintaining economic activity in downturns can have long-term positive impacts on population mental health."

"[T]hese results
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Modrek S, Rehkopf DH. Long-term Effects of Local Area New Deal Work Relief in Childhood on Late Life Depression. J Gerontol B Psychol Sci Soc Sci. 2024 Dec 27:gbae207. doi: 10.1093/geronb/gbae207. Epub ahead of print. PMID: 39727097.

# **NOW & THEN**

## In 1955...

The top song on Billboard charts was "Cherry Pink and Apple Blossom White" by Perez Prado. "Rock Around the Clock" by Bill Haley and His Comets was a close second.

Today...

The Billboard Hot 100 listed "Lose Control" by Teddy Swims as the number one song of 2024.

## In 1955...

"Did you hear the post office is thinking about charging 7 cents just to mail a letter?" At the time, it cost 3 cents, which is equivalent to 35 cents today.



Today...
It costs 73 cents to mail a oneounce letter.

# In 1955...

"It won't be long before \$1,000 will only buy a used [car]!" Today...

The average price of a new car in 2025 is around \$48,000. A used car? \$25,547.

https://en.wikipedia.org/wiki/Billboard\_yearend\_top\_30\_singles\_of\_1955 https://www.dollartimes.com/inflation/items/ price-of-a-us-stamp-in-1955 https://www.moneygeek.com/resources/ average-price-of-a-new-car/ https://caredge.com/guides/used-car-pricehttps://www.moneygeek.com/resources/ average-price-of-a-new-car/

# **ADOLESCENT COGNITION IN** HIGH SCHOOL AS A PREDICTOR OF MIDLIFE ALCOHOL **DRINKING PATTERNS**

ADOLESCENT COGNITION SCORES MAY PREDICT ALCOHOL CONSUMPTION BEHAVIORS LATER *IN LIFE* 

Using measures of adolescent cognition collected during WLS participants' junior year of high school, researchers examined the relationship between adolescent cognition and midlife (50-60 years) alcohol use. Results suggest that a higher adolescent cognition may predict a higher likelihood of moderate or heavy drinking in midlife, but fewer episodes of bingedrinking. Researchers also found that the relationship between adolescent cognition and midlife drinking may be explained by other factors such as household income.

Natalie Druffner, Donald Egan, Swetha Ramamurthy, Justin O'Brien, Allyson Folsom Davis, Jasmine Jack, Diona Symester, Kelston Thomas, Jayme M Palka, Vishal J Thakkar, E Sherwood Brown, IQ in high school as a predictor of midlife alcohol drinking patterns, Alcohol and Alcoholism, Volume 59, Issue 4, July 2024, agae035, https://doi. org/10.1093/alcalc/agae035



# IN CLOSING...

Finally, a salute to all of the good Wisconsin youth and their parents who suffered this intrusion into their affairs and gave thoughtful response to the inquiry.

Quote from: Little, Kenneth. "A State-Wide Inquiry Into Decisions of Youth About Education Beyond High School." Translated by University of Wisconsin School of Education. United States Department of Health, Welfare and Education, September 1958.

The WLS began from a questionnaire given to every high school senior in the state of Wisconsin in the spring of 1957. The questionnaire was designed by the Wisconsin Department of Public Instruction and was administered by J. Kenneth Little, a professor in the University of Wisconsin's School of Education. The questionnaire was primarily developed to study who goes to college in Wisconsin and who does not. In 1958, when writing up the first report about this study, Professor Little concluded with this acknowledgement; "Finally, a salute to all of the good Wisconsin youth and their parents who suffered this intrusion into their affairs and gave thoughtful response to the inquiry."

Today we hope that you might describe our interactions with you as a "welcome interruption" rather than an "intrusion to suffer through!" But either way, we do salute your sixty-eight year commitment to help us to advance research on how early-life characteristics impact later-life health.





We'd like to hear from you if your telephone number, email address, or address has changed. Email is the quickest way to update your information, but we are happy to hear from you however is most convenient you. Thank you so much!



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The WLS will never ask you for a donation, but some of you have asked how you can make a gift to the WLS. We've learned that there are a couple of ways to give: Online at https://supportuw.org/giveto/sociology

After entering your donation amount and clicking 'Checkout', you will see 'Gift Options' -- please click the box labeled "Dedicate my gift in honor or memory of a person or pet" and list the WLS.

### OR

Mail a check payable to University of Wisconsin Foundation In the Note field, write: "Sociology Fund 112751500-WLS" University of Wisconsin Foundation U.S. Bank Lockbox P.O. Box 78807 Milwaukee, WI 53278-0807





