



Mental Health America Report

Connection to Nature and Well- Being



L.L.Bean

Acknowledgments

Mental Health America (MHA) was founded in 1909 and is the nation's leading national nonprofit dedicated to promoting mental health, well-being, and illness prevention. People with lived experience are at the heart of everything we do, and we use education, direct community services, and research to work toward our goal of a world where everyone can flourish and live a purposeful life. MHA's independent research was made possible by the generous support of L.L.Bean.

This report was written in 2023 by Mika Sakamoto and Theresa Nguyen, Mental Health America.

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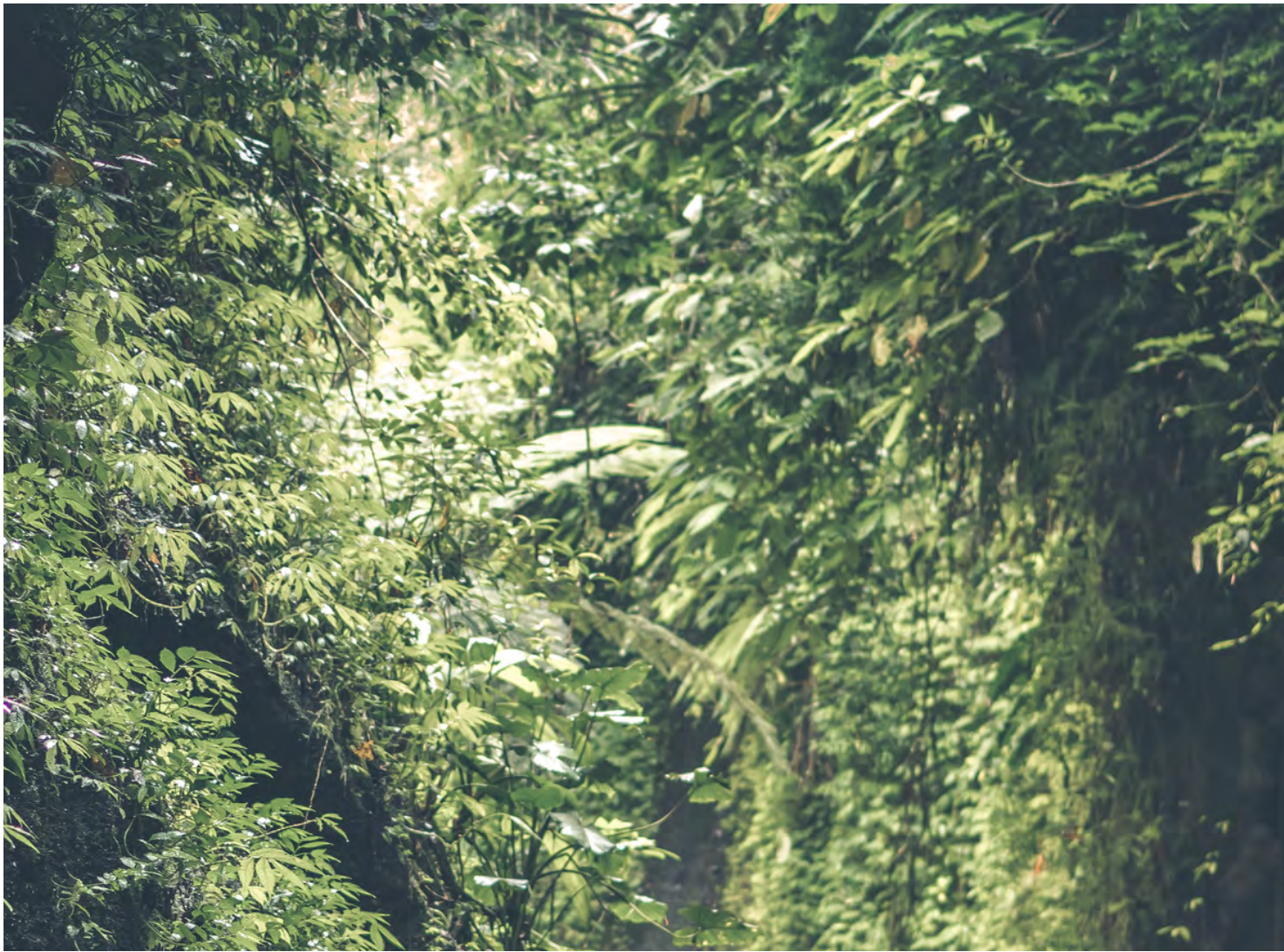


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01 Executive Summary

Our survey of 3,354 people provides insight into how connection, specifically connection with nature, impacts mental health.





68% percent of respondents wished they had more time outdoors.

Of those who wished they had more time outdoors, more than anything, they wanted to be in nature away from their neighborhoods (36%).



Over 96% of respondents reported having access to “taking a walk” and “just being outside.”

(e.g., sunbathing, gardening, sitting outside)

Lack of social connections and time were the main barriers to spending time outdoors.



46% reported they didn't have anyone to spend time with outdoors.

45% reported time constraints and/or obligations as a barrier.

79% of people affirmed that being outdoors helped their mental health.

“*Being outdoors always helps my mental health. It helps me get and stay grounded and remain in the present.*”



There was a linear relationship between age and connection to nature across all age groups.



34% of adults over 25 felt “very connected” to nature, versus 16% of those under 25.



Inversely, 18% of youth under 25 reported feeling “not connected at all” to nature, versus 9% of adults over 25.



Rural respondents felt slightly more connected to nature.

64% of people said they felt somewhat or very connected to nature, compared to 59% from suburban and urban locations.



35% of respondents with an income of less than \$80,000 reported that they did not spend time outdoors,

compared to 26% of respondents with an income over \$80,000.

Spending more time outdoors can strengthen your spiritual practice.

There is a strong correlation between connection to nature and connection to spirituality, mindfulness, or purpose.

Among those who were very connected to nature,

77% reported that they were somewhat or very connected to spirituality.

“*Every time I'm in nature it helps remind me of my immediate connection to the universe.*”





Based on our findings here are some action items we can take to be more connected.

ACTION ITEM

If you don't have access to a park or can't participate in outdoor recreation, try taking a walk or just being outside, wherever it's available and safe. These activities are free and not that time consuming.

Going for a 10-minute walk or spending your lunch break outside is manageable for almost anyone.



“ *Long walks outdoors have helped me process difficult situations when I'm feeling stuck.* ”

ACTION ITEM

Loneliness and isolation are real barriers to mental wellness.

Try reaching out to a friend or joining an outdoor club.



ACTION ITEM

If you are in an urban area, try to get out of the city occasionally.

If transportation is an issue, carpool with friends who own vehicles, check bus and train routes that have stops near parks or join a club that charters transportation at a low cost.

“ *Almost always, when I take time to intentionally enjoy the outdoors, I feel a lot more at peace.* ”



02 The Survey

The Connectedness and Well-being Survey consisted of 26 questions plus required demographic information. The first section contained five introductory questions about connectedness in different domains. The first four questions asked, “How connected do you feel to...” (1) nature/outdoors; (2) spirituality, mindfulness, or purpose; (3) people/others; and (4) yourself. Respondents could choose from a four-point Likert scale ranging from “not connected at all” to “very connected.” The fifth introductory question asked, “How often do you feel like life offers opportunities for wonder, inspiration, or awe?” with answer options on a five-point frequency Likert scale ranging from “never” to “always.”

The second section contained seven questions for each of the three following domains (21 questions total): connection to nature, connection to spirituality, and connection to others. They asked about which activities people think of when they think about connecting to these domains; which activities they regularly engage in; whether they wish they had more time for activities and if so, which ones; which activities they do not have access to; barriers to access; and a free-response question asking respondents to describe a time when connecting to nature, spirituality, and others helped their mental health.

Demographic questions were required fields and asked age, gender, race/ethnicity, income, sexual orientation, physical/mental disabilities/conditions, community type (rural, suburban, or urban), and geographic location (country, state, ZIP code).

The Connectedness and Well-being survey was live on the MHA Screening website from October 2022 until January 2023. Promotion of the survey was done through MHA’s network, including through MHA’s newsletter and MHA social media accounts. The survey was taken by 5,704 respondents globally. Fifty-nine percent (N=3,354) were from the United States. Among the 3,354 respondents to the survey, 2,589 took a mental health screen along with the connection survey. Seven hundred sixty-five survey respondents did not take a mental health screen (and likely came from MHA’s network). Respondents from MHA’s network were older (83% were over 18) and already connected to mental health systems as compared to those from MHA Screening, who were younger (65% were over 18) and generally undiagnosed and not connected to any network. The following analysis is based on the 3,354 users in the U.S. only. Tables displaying “select all that apply” responses have figures rounded to the nearest whole number.

Age

Twenty percent (N=686) of survey respondents were young adults aged 18-24. The next-most prevalent age groups were adults 25-34 (18%, N=589) and adults 35-44 (14%, N=457). This sample was, on average, younger than the general U.S. population.

Age range	Percent	Number
8-10	0.60%	20
11-13	10.55%	354
14-15	10.38%	348
16-17	9.81%	329
18-24	20.45%	686
25-34	17.56%	589
35-44	13.63%	457
45-54	7.84%	263
55-64	6.53%	219
65+	2.65%	89
Total	100%	3,354



“
I felt free, mentally,
spiritually and
physically!”

Gender

Sixty-seven percent (N=2,248) of respondents identified as female, 26% identified as male, and 7% identified as non-binary. Six percent (N=205) of the sample identified as transgender.

Gender	Percent	Number
Female	67.02%	2,248
Male	26.00%	872
Non-Binary	6.98%	234
Total	100.00%	3,354

Do you identify as transgender?	Percent	Number
No	93.89%	3,149
Yes	6.11%	205
Total	100.00%	3,354

Race/Ethnicity

The majority of the sample identified as non-Hispanic white (64%, N=2,139), followed by Hispanic or Latino (11%, N=370), and Black or African American (non-Hispanic) (8%, N=257).

Race/Ethnicity	Percent	Number
American Indian or Alaska Native	1.43%	48
Asian	4.74%	159
Black or African American (non-Hispanic)	7.66%	257
Hispanic or Latino	11.03%	370
Middle Eastern or North African	0.63%	21
More than one of the above	6.77%	227
Native Hawaiian or other Pacific Islander	0.33%	11
Other	3.64%	122
White (non-Hispanic)	63.77%	2,139
Total	100.00%	3,354

Household Income

Twenty-four percent (N=809) of respondents reported a household income of less than \$20,000 annually. The next-most prevalent income groups were \$20,000-\$39,999 annually (18%, N=615) and \$40,000-\$59,999 (18%, N=587). Household income skewed lower in this sample than the general U.S. population.

Household income	Percent	Number
Less than \$20,000	24.12%	809
\$20,000 - \$39,999	18.34%	615
\$40,000 - \$59,999	17.50%	587
\$60,000 - \$79,999	13.39%	449
\$80,000 - \$99,999	8.47%	284
\$100,000 - \$149,999	10.44%	350
\$150,000+	7.75%	260
Total	100.00%	3,354

Sexual Orientation

Sixty percent (N=1,996) of the sample identified as straight. Sixteen percent (N=526) identified as bisexual, and 6% (N=212) identified as pansexual.

Which of the following best describes your sexual orientation?	Percent	Number
Asexual	5.69%	191
Bisexual	15.68%	526
Lesbian or Gay	5.58%	187
Other	3.52%	118
Pansexual	6.32%	212
Queer	3.70%	124
Straight	59.51%	1,996
Total	100.00%	3,354

Health Conditions

Nearly half of respondents (48%, N=1,599) reported living with any mental health or substance use condition. Thirty-seven percent (N=1,256) reported having no mental or physical health conditions.

Do you live with any of the following? Select all that apply.	Percent	Number
Any mental health or substance use condition	48%	1,599
None of the above	37%	1,256
Mental disability	19%	632
Any chronic illness	15%	509
Developmental or learning disability	11%	379
Physical disability	9%	300
Total	139%	4,675

Community Type

Most (46%, N=1,539) survey respondents reported living in a suburban community. Twenty-eight percent (N=941) lived in an urban community, followed closely by 26% (N=874) living in a rural community.

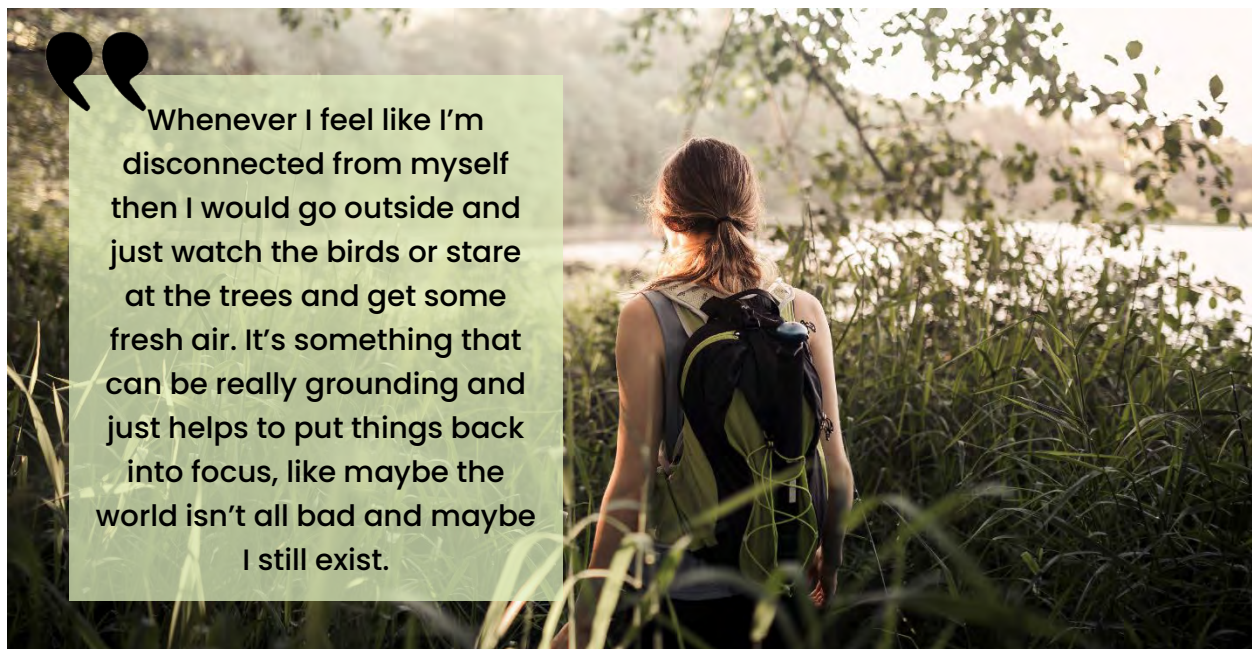
Do you live in an urban, rural, or suburban community?	Percent	Number
Rural	26.06%	874
Suburban	45.89%	1,539
Urban	28.06%	941
Total	100.00%	3,354

Survey Responses

Most respondents (37%, N=1,227) reported feeling “somewhat connected” to nature, followed by 26% (N=886) feeling “not really connected” and 23% (N=781) feeling “very connected” to nature.

How connected do you feel to nature/outdoors?	Percent	Number
Not connected at all	13.71%	460
Not really connected	26.42%	886
Somewhat connected	36.58%	1,227
Very connected	23.29%	781
Total	100.00%	3,354

Users were asked, “Can you think of a time(s) where being outdoors helped your mental health? What was that like?” This was a free-response question and the source of the quotes presented throughout this report. Forty-nine percent (N=1,650) of the sample answered this question. Of those who responded, 79% (N=1,304) answered affirmatively.



Can you think of a time(s) where being outdoors helped your mental health? What was that like?	Percent	Number
Yes	79%	1,304
No	21%	346
Total	100%	1,650

When asked about the top three activities that come to mind when thinking about spending time outdoors for mental health, the most common responses were taking a walk (68%, N=2,292), just being outside (e.g., sitting outside, gardening, sunbathing) (58%, N=1,936), and being in nature away from your neighborhood (e.g., forest, field, mountains, desert) (42%, N=1,402).

When you think of "spending time outdoors for your mental health," what kinds of activities immediately come to mind? (Select up to three)	Percent	Number
Taking a walk	68%	2,292
Just being outside	58%	1,936
Being in nature away from your neighborhood	42%	1,402
Visiting a neighborhood outdoor space	28%	940
Hiking	21%	710
Other outdoor recreational activities	21%	700
Outdoor exercising	18%	601
Camping	15%	494
Sports	10%	334
Total	281%	9,409

When asked about which outdoor activities respondents regularly engaged in, the most commonly reported activities were taking a walk (54%, N=1,816), just being outside (47%, N=1,565), and visiting an outdoor neighborhood space (e.g., park, beach, trail) (23%, N=773). One-third (33%, N=1,107) of respondents answered, "I do not spend time outdoors."

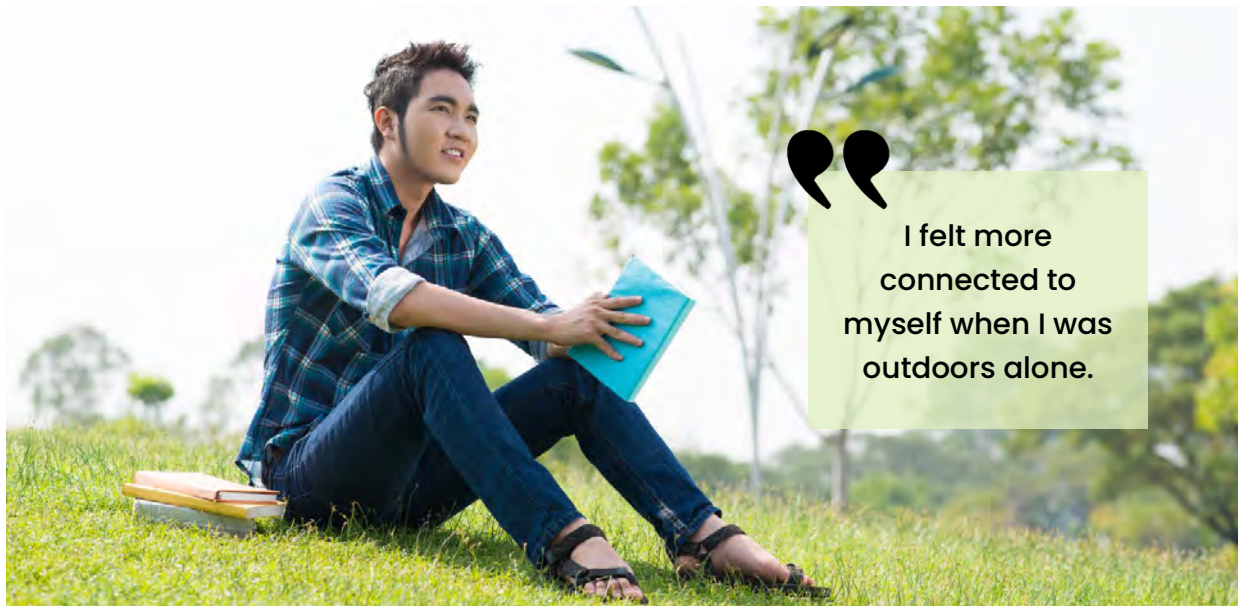
Which of the following ways do you regularly spend time outdoors? (Select all that apply)	Percent	Number
Taking a walk	54%	1,816
Just being outside	47%	1,565
I do not spend time outdoors	33%	1,107
Visiting a neighborhood outdoor space	23%	773
Being in nature away from your neighborhood	17%	579
Outdoor exercising	15%	489
Other outdoor recreational activities	12%	408
Hiking	11%	377
Sports	10%	329
Camping	7%	230
Total	229%	7,673

Over two-thirds of the sample (69%, N=2,303) said they wished they had more time for outdoor activities.

Do you wish you had more time to do outdoor activities?	Percent	Number
No	31.34%	1,051
Yes	68.66%	2,303
Total	100.00%	3,354

Respondents who answered “yes” to the previous question, “Do you wish you had more time for outdoor activities?” were then asked which activities they wished they had more time to do. The top choice was “being in nature away from your neighborhood” (52% of those who answered “yes” to the previous question, N=1,200), followed by “other outdoor recreational activities” (e.g., fishing, kayaking, canoeing, sailing, skiing, horseback riding, hunting) (37%, N=861), and “just being outside” (37%, N=844).

Which of the following do you wish you had more time to do? (Select up to three)	Percent	Number
Being in nature away from your neighborhood	52%	1,200
Other outdoor recreational activities	37%	861
Just being outside	37%	844
Taking a walk	35%	815
Hiking	30%	697
Camping	26%	601
Visiting a neighborhood outdoor space	25%	579
Outdoor exercising	23%	520
Sports	12%	268
Total	277%	6,385



When asked about which activities respondents did not have access to, “other outdoor recreational activities” (e.g., fishing, kayaking, canoeing, sailing, skiing, horseback riding, hunting) was the most common response (40%, N=1,348), followed closely by camping (40%, N=1,335), and hiking (32%, N=1,081). Forty percent (N=1,325) of the sample reported that they had access to all of the activities listed.

Which of the following outdoor activities do you not have access to? (Select all that apply)	Percent	Number
Other outdoor recreational activities	40%	1,348
Camping	40%	1,335
I have access to all of the activities above	40%	1,325
Hiking	32%	1,081
Being in nature away from your neighborhood	29%	988
Sports	24%	812
Outdoor exercising	17%	558
Visiting a neighborhood outdoor space	13%	441
Just being outside	4%	146
Taking a walk	4%	146
Total	244%	8,180

Respondents were asked to report up to three barriers that kept them from spending time outdoors. The top three responses were “not having anyone to do it with” (43%, N=1,540), “time constraints/obligations” (42%, N=1,510), and “I don’t know what I’m interested in or good at” (26%, N=924).

What are some of the barriers that keep you from "spending time outdoors"? (Select up to three)	Percent	Number
Not having anyone to do it with	43%	1,540
Time constraints/obligations	42%	1,510
I don't know what I'm interested in or good at	26%	924
Costs (e.g., admittance, outdoor gear)	25%	871
Lack of interest in nature/the outdoors	24%	858
Limited access	22%	776
Medical reasons	19%	668
Limited experience/knowledge of the activity	16%	562
Fear or bad past experiences	15%	543
Extreme weather conditions	13%	470
Total	245%	8,722

03 Connection to Nature, Self, Others, and Spirituality

In this section we explore how connection to nature is related to feeling connection overall.

Users were asked to rate their connection to nature, spirituality/purpose, people/others, and themselves on a four-point Likert scale (not connected at all, not really connected, somewhat connected, and very connected). They were also asked, “How often do you feel like life offers opportunities for wonder, inspiration, or awe?” with answer options on a five-point frequency Likert scale (never, rarely, sometimes, often, and always).

Close to 60% of respondents reported they were somewhat or very connected to nature. More people reported feeling very connected to nature compared to connection to spirit, others, or themselves. Among all respondents, individuals were most connected to nature and least connected to other people.

	Not connected at all	Not really connected	Somewhat connected	Very connected	Total connected
How connected do you feel to nature/outdoors?	13.71%	26.42%	36.58%	23.29%	59.87%
How connected do you feel to spirituality, mindfulness, or purpose?	21.68%	29.16%	32.65%	16.52%	49.17%
How connected do you feel to people/others?	17.20%	37.69%	34.14%	10.97%	45.11%
How connected do you feel to yourself?	18.75%	31.48%	34.11%	15.65%	49.76%

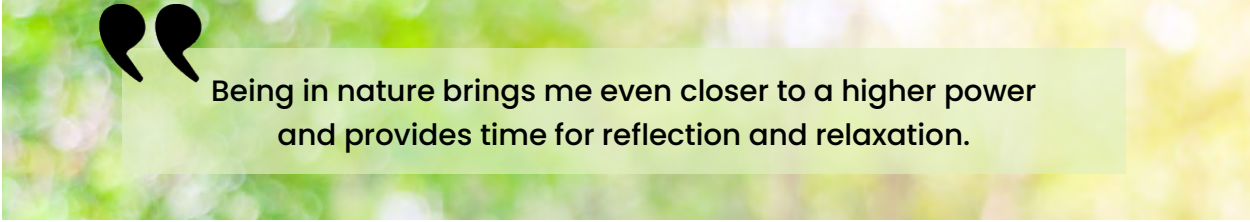
Survey responses came from two sources: users who came to mhascreening.org who were taking a mental health test, and members of MHA’s network who saw the survey in a newsletter or through social media. Fifty-seven percent (N=1,476) of respondents who came in through the mental health screening website (mhascreening.org) reported being connected to nature compared to 68% of users who took the survey from MHA’s network. This finding suggests that as users get older and start to manage mental health symptoms, global connection increases.

	Not connected at all	Not really connected	Somewhat connected	Very connected	Total connected
How connected do you feel to nature/outdoors?	14.87%	27.85%	35.42%	21.86%	57.28%
How connected do you feel to spirituality, mindfulness, or purpose?	23.64%	30.94%	31.29%	14.14%	45.43%
How connected do you feel to people/others?	17.65%	39.09%	33.53%	9.73%	43.20%
How connected do you feel to yourself?	19.85%	33.53%	33.29%	13.33%	46.62%

	Not connected at all	Not really connected	Somewhat connected	Very connected	Total connected
How connected do you feel to nature/outdoors?	9.80%	21.57%	40.52%	28.10%	68.62%
How connected do you feel to spirituality, mindfulness, or purpose?	15.03%	23.14%	37.25%	24.58%	61.83%
How connected do you feel to people/others?	15.69%	32.94%	36.21%	15.16%	51.37%
How connected do you feel to yourself?	15.03%	24.58%	36.86%	23.53%	60.39%

Those who were connected to nature were more connected to spirituality than they were connected to others or themselves ($r=.458$). Fifty-eight percent of those who said they were not at all connected to nature also said they were not connected to spirituality. Among those who were very connected to nature, 77% reported that they were somewhat or very connected to spirituality.

	How connected do you feel to nature/outdoors?			
How connected do you feel to spirituality, mindfulness, purpose?	Not connected at all	Not really connected	Somewhat connected	Very connected
Not connected at all	57.61%	26.86%	13.61%	7.30%
Not really connected	25.87%	40.18%	30.89%	15.88%
Somewhat connected	10.87%	27.88%	40.18%	39.05%
Very connected	5.65%	5.08%	15.32%	37.77%

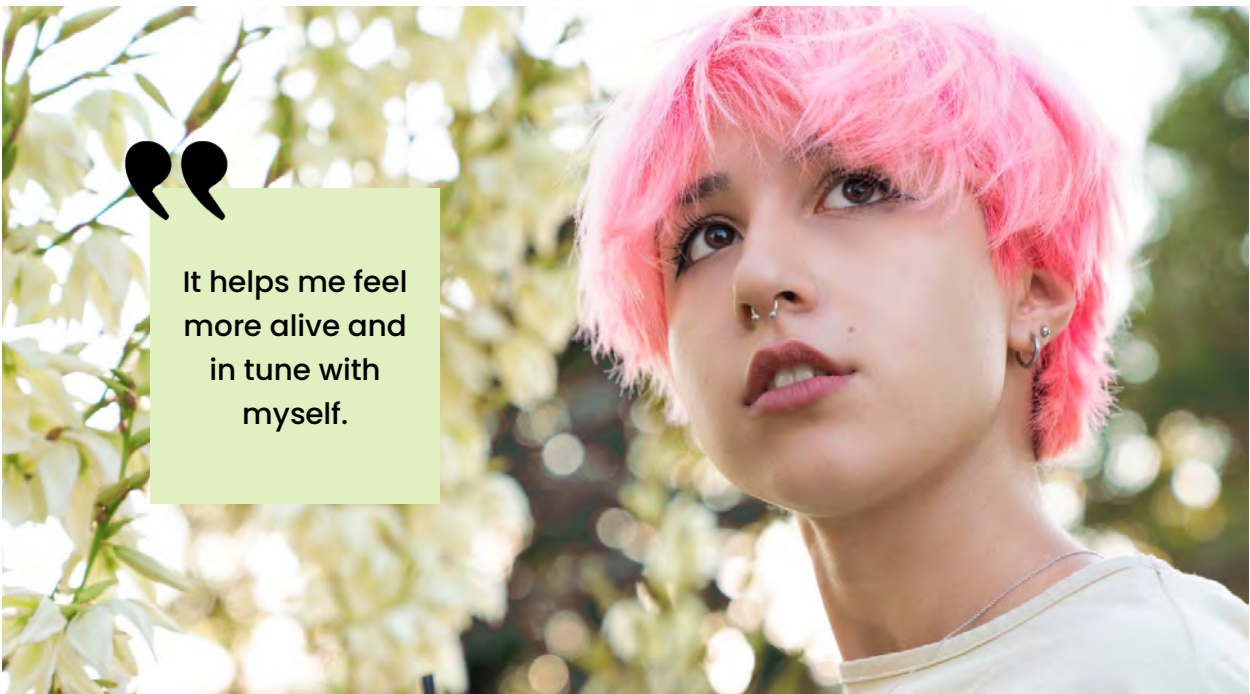


Being in nature brings me even closer to a higher power and provides time for reflection and relaxation.

Feeling more connected to nature was generally associated with feeling more connected to others and to oneself.

	How connected do you feel to nature/outdoors?			
How connected do you feel to people/others?	Not connected at all	Not really connected	Somewhat connected	Very connected
Not connected at all	32.61%	17.83%	13.12%	13.83%
Not really connected	37.17%	41.31%	38.71%	32.27%
Somewhat connected	24.35%	34.54%	36.59%	35.60%
Very connected	5.87%	6.32%	11.57%	18.31%

	How connected do you feel to nature/outdoors?			
How connected do you feel to yourself?	Not connected at all	Not really connected	Somewhat connected	Very connected
Not connected at all	35.65%	21.44%	13.85%	13.44%
Not really connected	34.35%	35.78%	32.76%	22.92%
Somewhat connected	22.17%	34.20%	36.76%	36.88%
Very connected	7.83%	8.58%	16.63%	26.76%



It helps me feel more alive and in tune with myself.

Feeling Wonder, Inspiration, or Awe

When asked, “How often do you feel like life offers opportunities for wonder, inspiration, or awe?”, those who were connected to nature were more likely to say that life offers them opportunities for wonder, inspiration, or awe. Feeling wonder, inspiration, and awe are tied to positive mental health and well-being.

How often do you feel like life offers opportunities for wonder, inspiration, or awe?	Percent	Number
Never	8.53%	286
Rarely	28.71%	963
Sometimes	33.87%	1136
Often	20.18%	677
Always	8.71%	292
Total	100%	3354

How often do you feel like life offers opportunities for wonder, inspiration, or awe?	How connected do you feel to nature/outdoors?			
	Not connected at all	Not really connected	Somewhat connected	Very connected
Never	27.39%	8.80%	3.83%	4.48%
Rarely	41.96%	38.37%	24.53%	16.52%
Sometimes	20.22%	38.71%	37.33%	30.99%
Often	6.96%	10.61%	26.00%	29.71%
Always	3.48%	3.50%	8.31%	18.31%



04 Connection to Nature and Mental Health

In this section, we examine the relationship between mental health screening results and connection to nature.

About 77% (N=2,589) of survey respondents also took a mental health screening. Our screening population skews younger and more symptomatic. When examining screeners and non-screeners separately, screeners report feeling less connected to nature.

Screeners vs. non-screeners

How connected do you feel to nature/outdoors?	Total sample (N=3,354)	Non-screeners (N=765)	Screeners (N=2,589)
Not connected at all	13.71%	9.80%	14.87%
Not really connected	26.42%	21.57%	27.85%
Somewhat connected	36.58%	40.52%	35.42%
Very connected	23.29%	28.10%	21.86%

Depression

How connected do you feel to nature/outdoors?	Total sample (N=3,354)	Mild depression (N=122)	Minimal depression (N=45)	Moderate depression (N=209)	Moderately severe depression (N=294)	Severe depression (N=358)
Not connected at all	13.71%	10.66%	2.22%	9.57%	14.29%	24.58%
Not really connected	26.42%	28.69%	22.22%	29.19%	35.37%	26.26%
Somewhat connected	36.58%	39.34%	44.44%	38.28%	28.57%	32.96%
Very connected	23.29%	21.31%	31.11%	22.97%	21.77%	16.20%

Anxiety

How connected do you feel to nature/outdoors?	Total sample (N=3,354)	Mild anxiety (N=65)	Minimal anxiety (N=17)	Moderate anxiety (N=100)	Severe anxiety (N=143)
Not connected at all	13.71%	10.77%	11.76%	11.00%	11.89%
Not really connected	26.42%	16.92%	11.76%	24.00%	25.17%
Somewhat connected	36.58%	53.85%	52.94%	34.00%	39.16%
Very connected	23.29%	18.46%	23.53%	31.00%	23.78%

ADHD

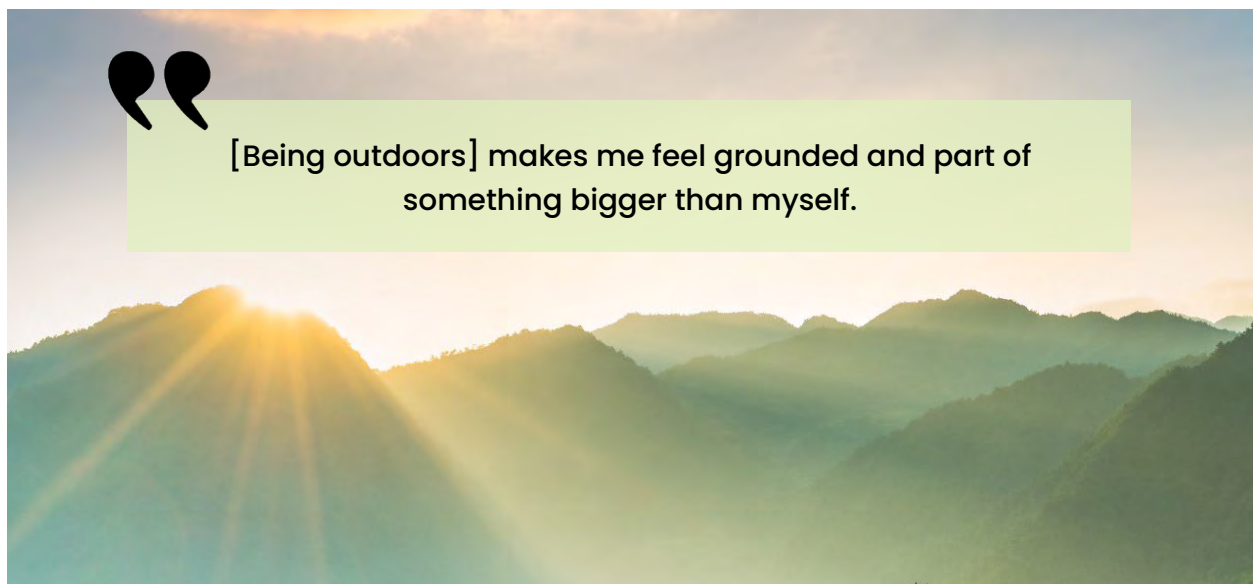
How connected do you feel to nature/outdoors?	Total sample (N=3,354)	ADHD unlikely (N=69)	ADHD likely (N=276)
Not connected at all	13.71%	15.94%	13.04%
Not really connected	26.42%	18.84%	27.17%
Somewhat connected	36.58%	33.33%	37.68%
Very connected	23.29%	31.88%	22.10%

Bipolar

How connected do you feel to nature/outdoors?	Total sample (N=3,354)	Bipolar negative (N=165)	Bipolar positive (N=111)
Not connected at all	13.71%	14.55%	13.51%
Not really connected	26.42%	23.03%	25.23%
Somewhat connected	36.58%	43.03%	33.33%
Very connected	23.29%	19.39%	27.93%

Psychosis

How connected do you feel to nature/outdoors?	Total sample (N=3,354)	Low/no risk for psychosis (N=57)	Possible risk for psychosis (N=150)
Not connected at all	13.71%	10.53%	14.67%
Not really connected	26.42%	19.30%	30.67%
Somewhat connected	36.58%	49.12%	30.00%
Very connected	23.29%	21.05%	24.67%



05 How People Connect to Nature

This section focuses on the relationship between connection to nature, which specific types of outdoor activities people engage in to connect with nature, and how different groups of people choose to spend time outdoors.

Connection to Nature and Outdoor Activities

The majority (37%, N=1,227) of the overall sample reported feeling “somewhat connected” to nature. However, when examining perceived connection to nature grouped by outdoor activities regularly engaged in, some differences emerged. Respondents who reported regularly engaging in “being in nature away from your neighborhood,” “camping,” “hiking,” and “other outdoor recreational activities” were more likely to report feeling “very connected” to nature. Among people who answered, “I do not spend time outdoors,” a much higher percentage felt “not really connected” (42%, N=461) or “not connected at all” (30%, N=328) to nature compared to other groups.

Those who reported “I do not spend time outdoors” also felt less connected to others, themselves, and spirituality, compared to people who reported regularly engaging in any outdoor activity. They were also much more likely to “never” or “rarely” feel that life offers opportunities for wonder, inspiration, or awe compared to other groups.

How connected do you feel to nature/outdoors?	Not connected at all	Not really connected	Somewhat connected	Very connected
Total sample	14%	26%	37%	23%
Being in nature away from your neighborhood	2%	9%	39%	50%
Camping	4%	11%	39%	46%
Hiking	2%	8%	44%	46%
I do not spend time outdoors	30%	42%	23%	6%
Just being outside	6%	19%	42%	33%
Other outdoor recreational activities	3%	11%	39%	47%
Outdoor exercising	5%	16%	41%	38%
Sports	7%	22%	42%	30%
Taking a walk	7%	22%	43%	28%
Visiting a neighborhood outdoor space	3%	16%	44%	36%

Outdoor Activities and Gender

When asked about spending time outdoors for mental health, female respondents were more likely to report regularly “just being outside” (51% of females, N=1,152) than male or non-binary respondents.

Male respondents were more likely than other genders to list sports when thinking about spending time outdoors for mental health, more likely to report participating in sports, and wish they had more time for sports. Males were also slightly more likely to engage in outdoor exercising and “other outdoor recreational activities” than other genders.

In a cisgender versus transgender comparison, every activity had a higher percentage of cisgender respondents than transgender. In response to the question, “Do you wish you had more time to do outdoor activities?” transgender respondents were more likely to answer “no” (46%, N=95) than cisgender respondents (30%, N=956).

Which of the following ways do you regularly spend time outdoors? (Select all that apply)	Total sample (N=3,354)	Female (N=2,248)	Male (N=872)	Non-binary (N=234)
Being in nature away from your neighborhood	17%	17%	18%	16%
Camping	7%	7%	6%	6%
Hiking	11%	11%	12%	8%
I do not spend time outdoors	33%	32%	35%	41%
Just being outside	47%	51%	37%	39%
Other outdoor recreational activities	12%	12%	14%	8%
Outdoor exercising	15%	14%	17%	11%
Sports	10%	9%	13%	7%
Taking a walk	54%	56%	50%	54%
Visiting a neighborhood outdoor space	23%	25%	19%	24%
Total	229%	234%	221%	213%



Outdoor Activities and Race

“Taking a walk” and “just being outside” were the most commonly reported outdoor activities across all groups. The groups most likely to answer “I do not spend time outdoors” were Asian (43%, N=69) and more than one race (41%, N=93).

Which of the following ways do you regularly spend time outdoors? (Select all that apply)	Total sample (N=3,354)	Asian (N=159)	Black or African American (N=257)	Hispanic or Latino (N=370)	More than one race (N=227)	Other (N=122)	White (non-Hispanic) (N=2,139)
Being in nature away from your neighborhood	17%	11%	11%	12%	16%	21%	19%
Camping	7%	3%	2%	4%	6%	11%	8%
Hiking	11%	7%	5%	8%	9%	11%	13%
I do not spend time outdoors	33%	43%	38%	38%	41%	29%	30%
Just being outside	47%	38%	42%	42%	49%	40%	49%
Other outdoor recreational activities	12%	6%	6%	5%	10%	16%	15%
Outdoor exercising	15%	13%	14%	12%	16%	17%	15%
Sports	10%	13%	12%	10%	12%	11%	9%
Taking a walk	54%	51%	53%	51%	56%	57%	55%
Visiting a neighborhood outdoor space	23%	19%	22%	25%	21%	23%	23%
Total	229%	203%	205%	208%	236%	235%	236%

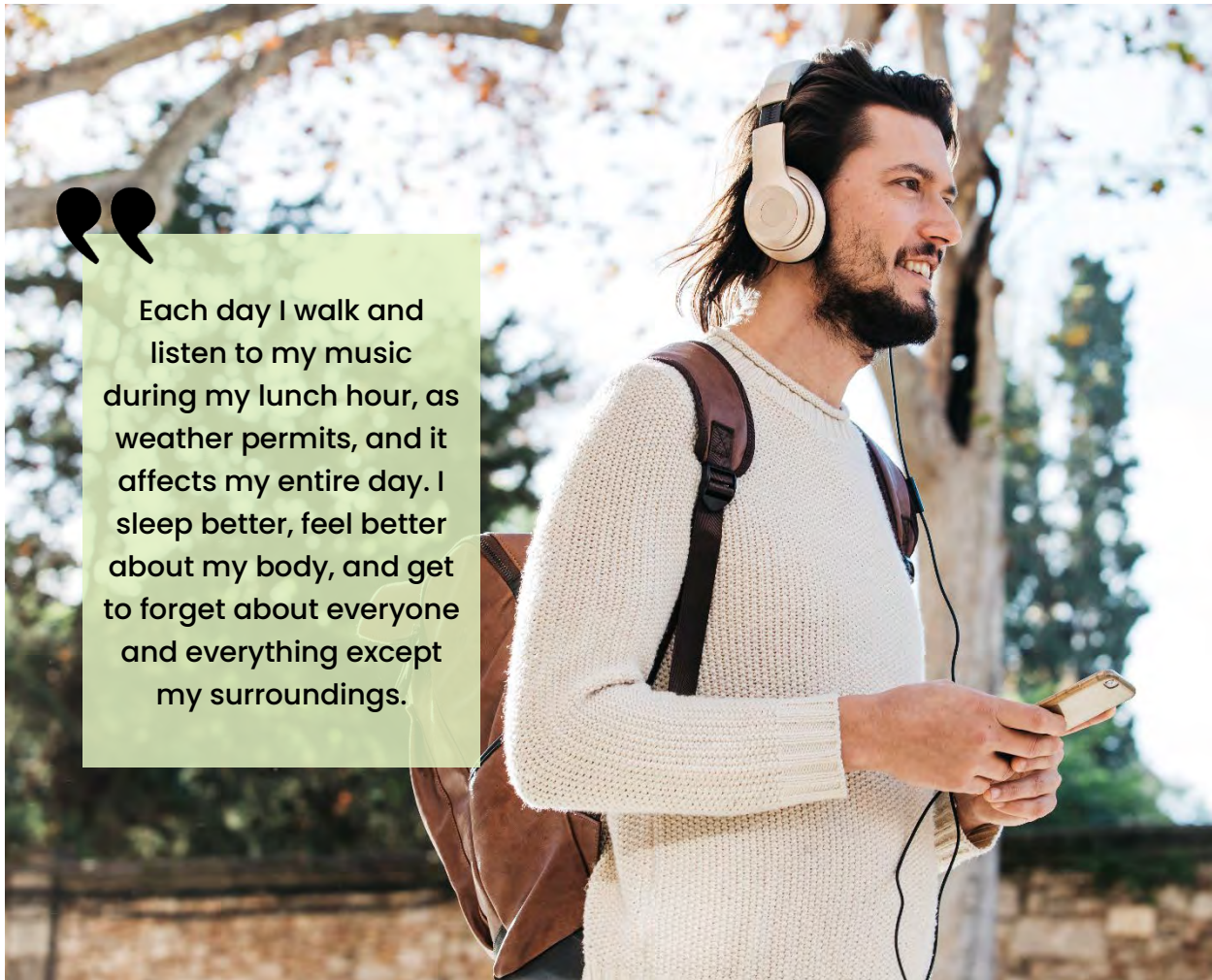
Outdoor Activities and Income

Thirty-five percent (N=871) of respondents with an income of less than \$80,000 reported that they do **not** spend time outdoors, compared to 26% (N=236) of respondents with an income over \$80,000.

Those with an income over \$80,000 were slightly more likely to report regularly playing sports and doing outdoor exercise (e.g., biking, running, swimming) compared to those with an income under \$80,000, and slightly more likely to report taking a walk.

When broken down into smaller groups, those reporting an annual income of over \$150,000 were more likely to report hiking (19%, N=49, compared to the mean of 11%), outdoor exercising (23%, N=59, compared to the mean of 15%), and sports (20%, N=51, compared to the mean of 10%) than any other income group.

Which of the following ways do you regularly spend time outdoors? (Select all that apply)	Under \$80,000 (N=2,460)	Over \$80,000 (N=894)
Being in nature away from your neighborhood	18%	16%
Camping	7%	7%
Hiking	10%	14%
I do not spend time outdoors	35%	26%
Just being outside	46%	49%
Other outdoor recreational activities	12%	13%
Outdoor exercising	13%	19%
Sports	8%	14%
Taking a walk	53%	58%
Visiting a neighborhood outdoor space	22%	25%
Total	224%	243%



Each day I walk and listen to my music during my lunch hour, as weather permits, and it affects my entire day. I sleep better, feel better about my body, and get to forget about everyone and everything except my surroundings.

06 Access to Nature

This section examines which groups have access to different types of outdoor activities, as well as their real and perceived barriers to access.

Outdoor Access and Race

Three groups were excluded from our race analysis due to a sample size of less than 50: American Indian or Alaska Native, Middle Eastern or North African, and Native Hawaiian or Pacific Islander.

White respondents were the most likely to report having access to all of the activities listed (45%, N=955), while Asian respondents were the least likely (26%, N=42). “Other outdoor recreational activities” (e.g., fishing, kayaking, canoeing, sailing, skiing, horseback riding, hunting) was the response most commonly reported as inaccessible by all groups. When broken down by race, Asian (51%, N=81) and Black or African American (51%, N=132) were most likely to report not having access to “other outdoor recreational activities.”

Which of the following outdoor activities do you not have access to? (Select all that apply)	Total sample (N=3,354)	Asian (N=159)	Black or African American (N=257)	Hispanic or Latino (N=370)	More than one race (N=227)	Other (N=122)	White (non-Hispanic) (N=2,139)
Being in nature away from your neighborhood	29%	42%	38%	40%	31%	33%	25%
Camping	40%	53%	51%	48%	45%	43%	35%
Hiking	32%	45%	44%	47%	32%	37%	27%
I have access to all of the activities above	40%	26%	28%	29%	36%	30%	45%
Just being outside	4%	4%	9%	9%	4%	2%	3%
Other outdoor recreational activities	40%	51%	51%	49%	44%	43%	36%
Sports	24%	28%	17%	24%	26%	27%	25%
Taking a walk	4%	3%	5%	7%	6%	7%	4%
Visiting a neighborhood outdoor space	13%	10%	12%	18%	13%	16%	12%
Outdoor exercising	17%	19%	18%	19%	23%	14%	15%
Total	244%	281%	273%	289%	259%	251%	227%

Outdoor Access and Income

Forty-nine percent (N=442) of respondents with an annual income of over \$80,000 reported having access to all activities, compared to 36% (N=883) of respondents with a household income of less than \$80,000. The activity with the largest disparity was “other outdoor recreational activities” (e.g., fishing, kayaking, canoeing, sailing, skiing, horseback riding, hunting).

The top barriers to access for both groups were “not having anyone to do it with” and “time constraints/obligations.” Costs (e.g., admittance, outdoor gear) were more of a barrier for people with a household income less than \$80,000 (29%, N=711) compared to those with an income over \$80,000 (18%, N=160). Time constraints and obligations were more of a barrier for those with higher income (59%, N=528) compared to those with lower income (40%, N=982).

Which of the following outdoor activities do you not have access to? (Select all that apply)	Under \$80,000 (N=2,460)	Over \$80,000 (N=894)
Being in nature away from your neighborhood	32%	23%
Camping	42%	34%
Hiking	35%	25%
Just being outside	5%	2%
Other outdoor recreational activities	43%	31%
Sports	27%	17%
Taking a walk	5%	2%
Visiting a neighborhood outdoor space	15%	9%
Outdoor exercising	19%	11%
I have access to all of the activities above	36%	49%
Total	258%	205%

Outdoor Access and Gender

Non-binary respondents were much less likely (20%, N=46) to report having access to all outdoor activities compared to both male (43%, N=371) and female (40%, N=908) respondents, and were much more likely to report not having access to each of the nine activities listed.

Male respondents were more likely than other genders to list sports when thinking about spending time outdoors for mental health, more likely to report participating in sports, and more likely to wish they had more time for sports.

A greater proportion of female respondents reported wishing they had more time for outdoor activities (71%, N=1,599) compared to male (64%, N=560) and non-binary respondents (62%, N=144).

Which of the following outdoor activities do you not have access to? (Select all that apply)	Total sample (N=3,354)	Female (N=2,248)	Male (N=872)	Non-binary (N=234)
Being in nature away from your neighborhood	29%	29%	28%	45%
Camping	40%	38%	40%	54%
Hiking	32%	31%	31%	45%
Just being outside	4%	4%	5%	7%
Other outdoor recreational activities	40%	39%	37%	60%
Sports	24%	24%	22%	35%
Taking a walk	4%	4%	4%	6%
Visiting a neighborhood outdoor space	13%	13%	12%	21%
Outdoor exercising	17%	17%	14%	26%
I have access to all of the activities above	40%	40%	43%	20%
Total	244%	239%	236%	320%

“Limited access” (e.g., transportation, there’s nothing near me); “fear or bad past experiences”; and “medical reasons” were reported as barriers to spending time outside in disproportionately higher percentages by non-binary respondents.

Twenty-one percent of non-binary respondents reported feeling “not connected at all” to nature, compared to 15% of male respondents and 12% of female respondents.

What are some of the barriers that keep you from “spending time outdoors”? (Select up to three)	Total sample (N=3,354)	Female (N=2,248)	Male (N=872)	Non-binary (N=234)
Costs (e.g., admittance, outdoor gear)	26%	26%	27%	24%
Extreme weather conditions	14%	15%	11%	10%
Fear or bad past experiences	16%	16%	14%	21%
I don’t know what I’m interested in or good at	28%	27%	28%	32%
Lack of interest in nature/the outdoors	26%	24%	28%	33%
Limited access	23%	23%	22%	32%
Limited experience/knowledge of the activity	17%	17%	16%	15%
Medical reasons	20%	20%	18%	25%
Not having anyone to do it with	46%	47%	45%	43%
Time constraints/obligations	45%	45%	47%	37%
Total	260%	260%	258%	273%

Transgender respondents were less likely (20%, N=42) to report having access to all outdoor activities compared to cisgender respondents (41%, N=1,283).

Transgender respondents were more likely to report “lack of interest in nature/the outdoors” (39%, N=79) as a barrier to access compared to cisgender respondents (25%, N=779), as well as medical reasons (30% of transgender respondents, N=61; 19% of cisgender respondents, N=607). Cisgender respondents were more likely to list “time constraints/obligations” (46%, N=1,437) compared to transgender respondents (36%, N=73), as well as “extreme weather conditions” (14% of cisgender respondents, N=453; 8% of transgender respondents, N=17).

Which of the following outdoor activities do you not have access to? (Select all that apply)	Total sample (N=3,354)	Cisgender (N=3,149)	Transgender (N=205)
Being in nature away from your neighborhood	29%	29%	41%
Camping	40%	39%	60%
Hiking	32%	31%	46%
Just being outside	4%	4%	8%
Other outdoor recreational activities	40%	39%	60%
Sports	24%	24%	34%
Taking a walk	4%	4%	8%
Visiting a neighborhood outdoor space	13%	13%	23%
Outdoor exercising	17%	16%	26%
I have access to all of the activities above	40%	41%	20%
Total	244%	239%	325%



I go to the beach daily and its expansiveness and beauty minimizes my cares and soothes and inspires my soul. Gardening and feeding the birds daily and creating a beautiful habitat in my own yard also brings daily awe and joy.

Gave me a little space from what was bothering me or enhanced feelings of joy and play.

Just getting outside for a short walk around my neighborhood helps me to feel more hopeful and replenished. The sun, sounds of nature, waving hello to others, seeing animals -- it gives me a mental break.

It gives me perspective and room to breathe. Whatever else is going on at home, when I'm outside and alone I am okay.

Whenever I feel upset or overwhelmed I go to a nearby park. I think 9 out of 10 times it immediately helps, and I used to go there every day last year. So if I need to count like, crises that going to the park helped with, I'd be at a solid 15 to 25.

Always helps clear my mind and reset emotions or intentions.

I felt free, away from my problems at home. I was able to leave and just take a breath. I was able to breathe and work out all my stress into keeping my legs moving.

Being at the beach is always very relaxing. I feel like I can clear my head and just enjoy the sounds, the smells, and the sights. I feel relaxed just feeling the warmth of the sun.

During the height of the pandemic and last summer during my deep struggle with my mental health being outside was what kept me sane. I have always and will always love being outside.

07 Conclusion and Ways to Connect

Spending time outdoors is associated with improved mental health and stronger feelings of connection to nature, spirituality, oneself, and others. Connection to any and all of these domains is an important component of good mental health. It also seems that connection across all of these domains increases with age and lifespan development. Generally, younger people tend to experience less connection and more distress. As we get older, people develop the healthy coping skills, emotional support, and confidence that help us connect with ourselves and others and improves our mental health. Connecting through nature provides an opportunity to connect in ways that can be done independently (e.g., through taking a walk and practicing mindfulness) or provides a structure that helps us learn how to meet and spend time with others (e.g., through running, hiking, or camping groups).

Connecting to nature is most strongly associated with connecting to spirituality. People who regularly spend time in nature report feeling a greater sense of awe and wonder. These feelings are associated with recognizing that there is connection with all of life (plants, animals, human) or maybe even that there is a “more than” in the universe. This awareness can help us tap into a sense of hope for ourselves and the future or help us cope with negative feelings and emotions.

Some groups reported limited access to or interest in spending time outdoors due to a variety of barriers. “Not having anyone to do it with” was the most commonly reported barrier to getting outside. It would be beneficial to help people learn ways to reach out to friends, family, or new strangers to spend time outdoors together, whether it is a short walk around the neighborhood, a day at the beach, or a multi-day backpacking trip. At a systemic level, more attention and funding can provide support for those who feel they do not have anyone to spend time with outdoors. Local cities and counties can fund events for shared outdoor activities as part of a public mental health or public health approach to wellness.

Spending time outdoors alone can also facilitate connection to the self. Many people reported that being in nature by themselves helped them feel more grounded and calm.

“[Spending time outdoors] helped immensely when I was a teenager. I often went for walks away from home or even went to the beach by myself just to be anywhere but where I was. It helped me recenter myself and reflect on big emotions. It was always a reflective experience but one that left me with a sense of peace.”

“Time constraints/obligations” was the second-most common barrier. Between work, school, and taking care of a family and household, it can be hard to find time to get outside. Our results show that people who regularly reported “just being outside,” “taking a walk,” and “visiting a neighborhood outdoor space” still experienced a greater sense of connection to nature compared to those who didn’t spend time outside. These three activities don’t require much of a time (or financial) commitment. Almost anyone can manage taking a 10-minute walk each day, visiting a local park, or simply sitting outside for a few minutes.

Addressing an equity issue, transgender and non-binary individuals report having less access to outdoor activities than cisgender individuals. These groups can benefit from joining an outdoor organization that caters to the LGBTQ+ population, such as the Venture Out Project. Similarly, it may be valuable for people of color to join a BIPOC-focused outdoor group. These specialized groups may help people from marginalized communities feel more comfortable entering outdoor spaces and foster a sense of community. Below are links to additional supports and resources for the LGBTQ+ and BIPOC communities.

- ventureoutproject.com
- fieldmag.com/articles/lgbtq-outdoor-groups-nonprofits
- fieldmag.com/articles/black-indigenous-poc-outdoor-collectives-nonprofits-instagram
- melaninbasecamp.com/trip-reports/bipoc-outdoor-resources
- melaninbasecamp.com/trip-reports/5-asian-american-led-outdoor-groups

