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## STATISTICAL INSIGHTS ON THE ARTS

# Canadians' Arts Participation, Health, and Well-Being

SIA report 53

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## Executive summary

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*Canadians' Arts Participation, Health, and Well-Being*, the 53<sup>rd</sup> report in the *Statistical Insights on the Arts* series, probes the relationships between 15 arts, culture, and heritage activities and four aspects of health and well-being:

- Overall health
- Mental health
- Satisfaction with life
- Satisfaction with feeling part of the community (i.e., sense of belonging)

The analysis is based on Statistics Canada's 2016 *General Social Survey*, a representative survey of 9,844 Canadians 15 years of age or older who reside in the ten provinces.

For health and well-being, this report interprets "positive" results as:

- Higher frequency of self-reported very good or excellent health (52% of all Canadians report their health as very good or excellent)
- Higher frequency of self-reported very good or excellent mental health (62% of all Canadians report their mental health as very good or excellent)
- Higher frequency of relatively strong satisfaction with life (the average rating for all Canadians is 7.9, based on a scale from 0 to 10)
- Higher frequency of relatively strong satisfaction with feeling part of community (the average rating for all Canadians is 7.3, based on a scale from 0 to 10)

While the research reflects data from a 2016 survey, it shows important linkages between the arts and well-being, linkages that are particularly important within the current pandemic and eventual post-pandemic

recovery. The pandemic has also raised awareness that many socio-economic factors (e.g., income, age, Indigenous identity, racialized groups) can have a substantial influence on individuals' health and well-being. This report extends the discussion by investigating whether cultural activities are another factor in Canadians' health and well-being. If cultural activities are related to health and well-being, then equitable access to culture can be related to equitable health outcomes.

## Methods and limitations

The data analysis for this report is comprised of three complementary methods:

1. A count of the number of arts, culture, and heritage activities where attendees or participants have more positive results than non-attendees or non-participants on measurements of the four aspects of health and well-being. This portion of the exploratory analysis identifies potential connections between 15 cultural activities and well-being. The analysis is predominantly related to in-person cultural activities (because of the survey wording), but a few survey questions specifically identified digital experiences (i.e., digital music, books, news, and magazines).
2. Connections between a cultural participation index and measurements of the four aspects of health and well-being. The cultural participation index captures both breadth and depth of attendance and participation: the index score is highest when someone frequently attends or participates in many different cultural activities. While still exploratory in nature, this analysis identifies connections

between extensive cultural attendance and participation (rather than individual activities) and well-being.

3. Statistical modelling (via regression analysis) of the association between seven arts activities, health, and well-being, after taking 15 socio-economic factors into account (including income, age, gender, region, Indigenous identity, racialized

### **15 arts, culture, and heritage activities**

- Active arts participation (in any form)
- Live theatre or comedy attendance
- Classical music attendance
- Popular music attendance
- Heritage or ethnic performance attendance
- Other cultural performance attendance
- Arts or cultural festival attendance
- Public art gallery attendance
- Museum attendance (other than an art gallery)
- Historic site attendance
- Attendance at a zoo, aquarium, botanical garden, planetarium, or observatory
- Book reading (in any format)
- Magazine reading (in any format)
- Watching a movie (in any format)
- Listening to recorded music (in any format)

### **3 additional combinations of cultural activities**

- Live music attendance (combining popular and classical music)
- Attendance at any of six performing arts or festival activities
- Attendance at any of four museum or heritage activities

groups, and more). In other words, the statistical models examine whether arts attendees simply fit the socio-economic profile of healthy citizens, or whether arts attendance might help explain aspects of health and well-being that are beyond socio-economic analysis. In this report, the statistical models represent the strongest evidence of connections between arts activities, health, and well-being. Readers should keep in mind, however, that these models identify associations, not causal links. Also, the causal link could go in the opposite direction. If people who are in very good or excellent health are more likely to attend arts activities than less healthy Canadians, a “positive” correlation could be interpreted as an indicator of the lack of accessibility of arts activities.

## **Key findings**

For each aspect of health and well-being, the analysis shows that:

- There is a strong connection between cultural participation and health.
- There is solid evidence of a connection between cultural participation and mental health.
- There is a moderate connection between cultural participation and satisfaction with life.
- There is a limited connection between cultural participation and community belonging.

The data in Table ES1 show instances where those who participate in cultural activities report better health, better mental health, greater satisfaction with life, and possibly a greater sense of community belonging.

The simple existence of a difference between cultural attendees or participants and non-attendees or non-participants is counted in the middle column of Table ES1. The data point to many linkages between cultural activities and well-being, with particularly strong results for health, mental health, and satisfaction with life.

The final column identifies whether the differences are statistically significant, given the margins of error of each statistic.<sup>1</sup> Statistical significance provides greater confidence that the differences are “real” and not just small differences (within the margins of error). There are many statistically significant differences for health and mental health, but few or none for above average

satisfaction with life and above average satisfaction with feeling part of community.

## Strong connection with health

Arts and culture activities have a strong statistical connection with overall health. Attendees or participants in all 15 arts, culture, and heritage activities are more likely to report very good or excellent health than non-attendees or non-participants. For 14 of the 15 activities, the differences are statistically significant, including arts activities such as: active arts participation; live theatre or comedy attendance; classical and popular music attendance; cultural festival attendance; art gallery attendance; and book reading.

<b>Table ES1: Cultural participation, health, and well-being</b>		
<b>Number of activities with differences between participants and non-participants</b>		
<b>Aspects of health and well-being</b>	<b>Activities with positive differences</b>	<b>Activities with statistically significant (positive) differences</b>
Health (self-rating of very good or excellent)	15 / 15	14 / 15
Mental health (self-rating of very good or excellent)	15 / 15	12 / 15
Satisfaction with life (self-rating of 8-10 on a scale from 0-10)	12 / 15	4 / 15
Satisfaction with feeling part of community (self-rating of 8-10 on a scale from 0-10)	8 / 15	0 / 15

*Source: Hill Strategies, analysis of Statistics Canada's 2016 General Social Survey.*

<sup>1</sup> Statistical significance was identified using a t-test to determine if the differences met the threshold of  $p < .05$ .

Another positive indicator is the fact that overall health is better for people with higher levels of cultural engagement, as evidenced by the cultural participation index.

Regression models show that six of seven arts activities have an association with very good or excellent health, after taking socio-economic factors into account: active arts participation, public art gallery attendance, live music attendance, live theatre or comedy attendance, arts or cultural festival attendance, and book reading. This represents particularly strong evidence of a broad-based connection between arts activities and very good or excellent health.

In the regression models, socio-economic factors that are associated with health include: good eating habits; education; age (best for people between 25 and 44); and Indigenous identity (better for non-Indigenous than Indigenous people).

## **Solid evidence of a relationship with mental health**

The analysis provides evidence of a connection between cultural activities and mental health. Attendees or participants in all 15 arts, culture, and heritage activities are more likely to report very good or excellent mental health than non-attendees or non-participants. For 12 of the 15 activities, the differences are statistically significant, including arts activities such as: live theatre or comedy attendance; classical and popular music attendance; cultural festival attendance; art gallery attendance; and book reading.

Other positive evidence includes the fact that there is a higher level of self-perceived mental health for people with moderate, high, and very high levels of cultural participation than for those with low levels of cultural participation.

The report provides particularly strong evidence of a connection between three arts activities and very good or excellent mental health: live music attendance, live theatre or comedy attendance, and book reading. After taking socio-economic factors into account, regression models show that these three arts activities (of seven introduced into the models) have an association with very good or excellent mental health.

Socio-economic factors that are associated with very good or excellent mental health in the regression models include: education; good eating habits; age (worst for people under 25); and members of racialized groups (better for racialized than non-racialized people).

## **Moderate connection with overall satisfaction with life**

Some of the evidence in this report shows a positive connection between cultural activities and satisfaction with life. However, the connection is not uniformly positive, depending on the measurement used for satisfaction with life.

The measurement with the strongest apparent connection with cultural participation is the satisfaction rating of 7 to 10. Attendees or participants in all 15 arts, culture, and heritage activities are more likely to rate their satisfaction with life as 7 to 10 than non-attendees or non-participants. For

13 of the 15 activities, the differences are statistically significant.

There is also an apparent connection between cultural participation and above average satisfaction with life (i.e., ratings from 8 to 10). For this measurement, attendees or participants in 12 arts, culture, and heritage activities are more likely to report above average satisfaction with life than non-attendees or non-participants. However, the differences are statistically significant for just four activities.

There does not appear to be a connection between cultural participation and very strong satisfaction with life (i.e., ratings of 9 or 10). For this measurement, attendees or participants in two arts, culture, and heritage activities are more likely to report very strong satisfaction with life than non-attendees or non-participants, but neither of these differences are statistically significant. For three activities, there is a statistically significant *negative* difference between arts attendees or participants and non-attendees or non-participants.

The cultural participation index has different connections depending on the measurement of satisfaction with life as a whole:

- A positive connection with ratings of 7 to 10
- No clear connection with ratings of 8 to 10
- A mildly negative connection with ratings of 9 or 10

A statistical model provides particularly strong evidence of a connection between three arts activities and above average satisfaction with life (ratings from 8 to 10): live music attendance, live theatre or comedy attendance, and active arts participation.

These three arts activities (of seven introduced into the models) have an association with above average satisfaction with life, after taking socio-economic factors into account.

In the regression models, socio-economic factors that are associated with above average satisfaction with life include: immigrants to Canada (higher for immigrants than non-immigrants); members of racialized groups (higher for racialized than non-racialized people); urban vs. rural residents (higher for residents of rural areas); and age (highest for people under 25).

## Limited connection with sense of belonging

The report contains some positive evidence of a connection between cultural participation and Canadians' sense of belonging to their communities, but the evidence differs depending on the measurement used for community belonging.

The measurement with the strongest apparent connection with cultural participation is the satisfaction rating of 7 to 10. Attendees or participants in 11 of the 15 arts, culture, and heritage activities are more likely to rate their satisfaction with feeling part of their community as 7 to 10 than non-attendees or non-participants. For four activities, the differences are statistically significant.

There is a moderate connection between cultural participation and above average satisfaction with feeling part of their community (i.e., ratings from 8 to 10). For this measurement, attendees or participants in



eight arts, culture, and heritage activities are more likely to report above average satisfaction with feeling part of their community than non-attendees or non-participants. However, the differences are not statistically significant for any activity.

There is no apparent connection between cultural participation and very strong satisfaction with feeling part of community (i.e., ratings of 9 or 10). For this measurement, attendees or participants in five arts, culture, and heritage activities are more likely to report above average satisfaction with feeling part of their community than non-attendees or non-participants, but none of these differences are statistically significant. On the other hand, attendees or participants in four arts, culture, and heritage activities are *less* likely to report above average satisfaction with feeling part of their community than non-attendees or non-participants, and one of these differences is statistically significant.

The cultural participation index has different connections depending on the measurement of respondents' satisfaction with feeling part of their community:

- A mildly positive connection with ratings of 7 to 10
- No clear connection with ratings of 8 to 10
- No clear connection with ratings of 9 or 10

After taking socio-economic factors into account, three of the seven arts activities examined in a statistical model have an association with above average belonging to community (ratings from 8 to 10): live music attendance, live theatre or comedy attendance, and attendance at arts or cultural festivals. This represents particularly strong evidence of a connection between these three arts activities and above average sense of belonging to community.

In the regression models, socio-economic factors that are associated with feeling part of community include: having a child at home (higher for people with children); immigrants to Canada (higher for immigrants); and urban vs. rural residents (higher for residents of rural areas).

## Full report and data

The full report contains many more details about the research methods and findings. Report appendices contain detailed data for each arts, culture, and heritage activity, as well as information about the data source and survey questions. Further details about the regression models are provided in a Technical Supplement available at [HillStrategies.com](http://HillStrategies.com).

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