EXIMIUS REAL ESTATE ADVISORY

# Art and people: what science measures

## Work, health, public space and value: seventy-two references verified at the source

Workplaces · Retail · Healthcare · Well-being · Looking · Public space · Value

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Summary of the evidence · November 2026 · Companion to the report “Art and human behaviour”, v1.2

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THE STRUCTURE OF THE EVIDENCE

# Nine fields, seventy-two references, one rule

## 01

### What is measured at work

Offices, surveys of employees, forecourts and business districts: sixteen references, twelve indoors and four outdoors. This is where most figures circulate and where the evidence is thinnest.

## 02

### What is measured for care and the mind

Healthcare settings, physiology, well-being, longevity, education and looking. Randomised trials with contrasting results, and large cohorts that measure associations.

## 03

### What is measured in the city and on the market

Retail, public space, property prices, obligation schemes, art and nature. Image effects, correlations, thousands of works installed and no effect evaluated.

**The rule: every figure comes from the original publication, verified online on 21 November 2026, never from a second-hand report. Figures that cannot be verified are set aside.**

# An artwork does not produce a yield. Science measures what people do with it: choosing it, looking at it, living next to it.

None of the figures that follow proves that hanging an artwork is enough. All depend on the type of work, the place and the share left to those who occupy it.

*The right study, the right figure, the right level of evidence: this is how an argument about art stands up to due diligence.*

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1 THEME 1 OF 6 · WORKPLACES, INDOORS

# In the office, the gain comes from the choice left to the occupant, not from the artwork

The most cited experiment compares lean, enriched and occupant-decorated offices. The enriched office mixes plants and pictures: the effect specific to the artworks is not isolated, and the percentages come from the university's press release.

**PRODUCTIVITY, OFFICE DECORATED BY ITS OCCUPANT VERSUS LEAN OFFICE**

**+32%**

Office enriched with plants and pictures by the experimenter: +17%; 112 and 47 participants (Knight and Haslam 2010, press release)

The benefit is eroded when the occupant's choice is undone by authority (Knight and Haslam 2010)

Art posters on the wall: less anger and stress among men only, 210 students (Kweon et al. 2008)

Framed artworks in the staircase of an office building: no reported effect; signs +8.9%, music +8.9% (Kerr et al. 2004)

*Knight and Haslam 2010, J. Exp. Psychology: Applied; Kweon et al. 2008; Kerr et al. 2004 · Level: experiments, small samples*

# Wanted, but not the first expectation

**Three surveys give the same picture: almost nobody wants an office with no artwork, but decoration comes after light, furniture, the view and plants.**

**6%**
prefer “no painting”

**25%**
cite decoration

**4%**
put the workplace first

*Ifop for SFL 2024: 1,300 office employees in the Paris region · Ipsos bva for Beaux Arts Magazine 2025: 1,000 people, priority place for more visual arts. Commissioned surveys: they measure preferences, not effects.*

### WHAT THE OTHER FIGURES SAY

- 69% of the British employees surveyed: artworks in the office improve their well-being (Brookfield 2022)
- 53% say they would be more motivated if the employer offered arts activities (MORI 2002)
- 87% consider it important to spend money on decorating offices (Ifop for SFL 2024)
- Light 65%, furniture 40%, the view 33%, plants 27%: all ahead of decoration

*Brookfield Properties 2022; Arts & Business and MORI 2002; Ifop for SFL 2024*

**European Investment Bank: nearly 1,000 works hung in the Luxembourg offices, an arts committee made up of staff members, and no published study of their effects on staff. Attracting and retaining talent is a stated objective there, not a measured result.**

1 THEME 1 OF 6 · WORKPLACES, OUTDOORS

# On the forecourt, the use of the place decides the fate of the work

No survey of employees was found about a work on a forecourt, a campus or a business district. The available sources are a case study, an observation, an inventory and a review of activity.

**SIGNATURES AGAINST "TILTED ARC", FEDERAL OFFICE PLAZA, NEW YORK**

**1,300**

Work costing $175,000 installed in 1981, removed on 15 March 1989; at the 1985 hearing, 122 speakers out of 180 defended keeping it

Sculpture on an office plaza: passers-by are drawn to it, stop and talk about it; observation with no figure (Whyte 1980)

41% of the 503 privately owned public spaces of New York fulfil no public function; art is not measured there (Kayden 2000)

Sculpture in the City, London: 29 events, a little over 300 participants of whom 75% are employees; no effect measured (City of London 2025)

*Serra v. GSA, US Court of Appeals, 1988; Whyte 1980; Kayden 2000; City of London 2025 · Level: case study, observation, review of activity*

2 THEME 2 OF 6 · RETAIL

# Art changes the image of a product, not the sales of the shop

In marketing, the presence of an artwork gives the neighbouring product an image of luxury, whatever the subject of the work. The effect is demonstrated on attitudes; the only field study in shops finds no effect on commercial performance.

**PRODUCT RATING OUT OF 7, WITH OR WITHOUT AN ART IMAGE**

## 5.41 versus 4.47

Study in a restaurant, 100 customers; effect carried by perceived luxury (Hagtvedt and Patrick 2008)

Brand image: 3.77 with art versus 2.28 without art; brand extensions rated higher, 4.12 versus 3.10 (Hagtvedt and Patrick 2008)

Artwork in an advertisement: perceived value of an everyday product increased, three experiments, 516 participants (Estes et al. 2018)

Artworks in shops in Paris: image and satisfaction up, no effect on commercial performance (Vukadin et al. 2019)

*Hagtvedt and Patrick 2008, J. Marketing Research; Estes et al. 2018; Vukadin, Lemoine and Badot 2019 · Level: experiments, one field study*

# In hospital, three randomised trials, three different results

Healthcare settings are the best studied ground. Controlled trials there give contrasting results, and the only scoping review considers the evidence promising but uneven. No length of stay could be verified at the source.

PAINTING IN THE ROOM: ANXIETY, PAIN, LENGTH OF STAY

## No effect

Randomised trial, 186 patients: neither anxiety, nor mood, nor pain, nor length of stay changes; the hospital is better perceived (George et al. 2018)

Video artwork in a transplant room: lower anxiety the day before the transplant (p = 0.001), randomised trial, 199 patients (McCabe et al. 2013)

Nature image and sounds during bronchoscopy: better pain control, odds ratio 4.76; no effect on anxiety, 80 patients (Diette et al. 2003)

Scoping review: 14 studies including 4 randomised trials; reported stress down in 13 out of 14, with no mean effect calculated (Law et al. 2021)

*George et al. 2018; McCabe et al. 2013; Diette et al. 2003, Chest; Law et al. 2021, BMJ Open · Level: randomised trials, scoping review*

3 THEME 3 OF 6 · TYPE OF WORK AND PHYSIOLOGY

# The type of work matters more than the presence of art

The clearest effects come from figurative images of nature. Abstract art does no better than the absence of an artwork and can agitate some patients. The physiological measurements taken in galleries remain fragile.

**SALIVARY CORTISOL, TWENTY MINUTES IN FRONT OF ORIGINALS (PREPRINT)**

**-22%**

Non-randomised preprint, not peer-reviewed, 50 participants; no significant decrease in front of reproductions (Worrell et al. 2025)

Psychiatric unit: less as-needed medication with a nature photograph than with an abstract work or with no work (Nanda et al. 2011)

Emergency waiting rooms: less agitation and noise after the installation of nature artworks, 2 sites (Nanda et al. 2012)

Museum: systolic pressure down after the figurative art rooms, not after modern art, 77 participants (Mastandrea et al. 2019)

*Worrell et al. 2025; Nanda et al. 2011, 2012; Mastandrea et al. 2019 · Level: preprint, quasi-experimental; two studies by authors linked to a supplier of artworks*

4 THEME 4 OF 6 · WELL-BEING AND LONGEVITY

# Going to museums is associated with living longer

Large cohorts follow thousands of people for ten to fourteen years. They measure outings to the museum, the exhibition or the performance, not the presence of artworks in a place, and their authors rule out any causal conclusion.

**MORTALITY OVER 14 YEARS, FREQUENT CULTURAL OUTINGS VERSUS NONE**

**-31%**

Hazard ratio 0.69 (95% CI: 0.59 to 0.80) for frequent outings, 0.86 for infrequent outings; 6,710 people aged 50 and over (Fancourt and Steptoe 2019)

Dementia over 10 years: incidence rate ratio 0.51 for regular museum visits, 3,911 people; loneliness: odds ratio 0.68 (Fancourt et al. 2018; Tymoszuk et al. 2020)

Systematic review: 38 articles, 6,805 participants; against a control condition, only 6 measures out of 42 improve (Trupp et al. 2025)

WHO Europe: scoping review of more than 3,000 studies, all arts combined, with no quantified effect specific to artworks (Fancourt and Finn 2019)

*Fancourt and Steptoe 2019, BMJ; Fancourt et al. 2018; Tymoszuk et al. 2020; Trupp et al. 2025; Fancourt and Finn 2019, WHO · Level: cohorts (associations), reviews*

# People look at a work for less than thirty seconds

The experiments on school visits and on training the eye are the best controlled in the corpus. They show real but weak effects, and are a reminder of how little time a visitor gives to a work.

**MEAN TIME SPENT IN FRONT OF A WORK IN A MUSEUM**

## 27.2 s

Median of 17.0 s, 150 visitors, 6 paintings (Smith and Smith 2001); 38.75 s in the museum versus 28.25 s in the laboratory (Brieber et al. 2014)

Guided visit allocated by lottery, 10,912 pupils: critical thinking +9% of a standard deviation, nearly a third for rural pupils (Greene et al. 2014)

Medical students: observation score +19.1 points after 6 sessions in the museum, versus -13.5 in controls, 36 students (Gurwin et al. 2018)

Heavily decorated classroom: 38.6% of time off task versus 28.4% (Fisher et al. 2014, figures from the press release)

*Smith and Smith 2001; Brieber et al. 2014, PLoS ONE; Greene et al. 2014; Gurwin et al. 2018; Fisher et al. 2014 · Level: randomised trials, observation*

6 THEME 6 OF 6 · PUBLIC SPACE

# In the street, asphalt art goes with a fall in accidents

Public space is studied through before-and-after comparisons, with no control site. The falls in accidents rest on very small numbers, and no controlled study read establishes an effect of public art on crime.

**ACCIDENTS INVOLVING VULNERABLE ROAD USERS, 17 SITES, BEFORE AND AFTER**

**-50%**

Mean per site, on 13 accidents before and 6 after; all accidents -17%, but -1.2% in aggregate (Bloomberg Philanthropies 2022)

Update on 40 sites: vulnerable road users -52% at the mean site; the effect specific to the work is not isolated, according to the report itself (Bloomberg Philanthropies 2026)

Tagged walls: 69% of passers-by drop litter, against 33% in front of clean walls (Keizer et al. 2008); a mural reduces tags on the wall studied (Craw et al. 2006)

Junction painted by residents: neighbourhood rated excellent by 65% of residents, against 35% in the control neighbourhood (Semenza 2003)

*Bloomberg Philanthropies 2022, 2026; Keizer et al. 2008, Science; Craw et al. 2006; Semenza 2003 · Level: before-and-after with no control, field experiments*

6 THEME 6 OF 6 · PROPERTY VALUE

# On prices, correlations, no quantified premium

The serious work links art to property values without deriving a premium from it. The effect of a large museum is local, that of galleries disappears when the method is rigorous, and nothing solid exists on the rents of buildings fitted with artworks.

**PRICE OF THE HOMES CLOSEST TO A LARGE MUSEUM (MASS MOCA)**

## +$11,728

North Adams, 1,461 sales: effect up to 1.7 km, mean rise below 5%; report not peer-reviewed (Sheppard et al. 2006)

London, 119 neighbourhoods: more “art” photographs, stronger gain in price rank; correlation, no quantified premium (Seresinhe et al. 2016)

Manhattan: the link between galleries and change in the built fabric disappears with the instrumental variable; no causal effect (Schuetz 2014)

Bilbao: public investment recovered in 7 years excluding the collection, around 2010-2014 including the collection (Plaza 2006)

*Sheppard et al. 2006; Seresinhe et al. 2016, Royal Society Open Science; Schuetz 2014, J. Urban Economics; Plaza 2006 · Level: hedonic, correlation, quasi-experimental*

6 THEME 6 OF 6 · SCHEMES

# Thousands of works installed, no effect evaluated

Obligation or incentive schemes have placed works in buildings and at their foot for decades. They publish counts; none has been the subject of a published evaluation of its effects on occupants or users.

**WORKS INSTALLED IN SOUTH KOREA SINCE THE 1995 OBLIGATION**

**26,085**

South Korea: 0.7% of construction cost from 10,000 m², 0.5% beyond 20,000 m², 1% for public buildings (official portal)

France, 1 % artistique scheme: more than 12,400 projects since 1951 (Ministry of Culture, 2002 decree)

France, “1 immeuble, 1 œuvre” charter: 13 signatories in 2015, 96 signatories and nearly 1,000 works in 2025 (Ministry of Culture)

New York, Percent for Art: 1% of the budget of eligible municipal construction, nearly 300 projects completed (City of New York)

*Korean portal for artworks in buildings; decree no. 2002-677; French Ministry of Culture 2015-2025; City of New York · Level: official texts and counts, with no evaluation*

TWO SOUTH KOREAN CASES · WHAT IS NOT YET MEASURED

# Real effects on image and public profile, effects on people still to be measured

**Two places that invest in art, visited in October 2026: the exhibition at the French Embassy in Seoul and Anyang Art Park.**



SEOUL · FRENCH EMBASSY

## Lee Bae and Jean-Michel Othoniel, in the gardens

Gardens and Résidence de France · 140 years of diplomatic relations, 2026 · attached to Frieze Seoul · no visitor numbers published



ANYANG · ART PARK AND APAP

## More than 60 works in a wooded valley

A triennial since 2005 · 603,857 visitors in one year (before 2020) · 8th edition in 2026: 41 artists or teams from 4 countries · no evaluation of effects



French Embassy in Korea; Korea JoongAng Daily 2026; City of Anyang; Seoul Shinmun 2019 · Level: declarative cases · Records 67 and 68 · Photos: Luc Monteil

# A visible public profile, no measurement on people

**No study measures the benefits of Anyang Art Park for its visitors or its residents: what is published deals with the project's image, or with other places.**

**603,857**

visitors in one year at Anyang Art Park (before 2020)

**60+**

works in the valley, a triennial since 2005

**0**

study found on the effects on people

Park attendance: figure from the Korea Culture and Tourism Institute, cited by Seoul Shinmun in April 2019 · online research of 22 November 2026, in French, English and Korean

### WHAT THE STUDIES SAY

· Online opinions on the APAP slightly more positive over time (Kim and Kim 2023a)

· Project launched without sufficient consultation, brand still weak (Kim and Kim 2023b)

· Yorkshire Sculpture Park: narratives of well-being, without measurement (Booth-Kurpnieks 2020)

· Art, gardening and collections: well-being up among 20 participants, with no control group (Thomson et al. 2020)

Records 69 to 72 of the report · Level: text analyses, interviews, qualitative studies

**To be measured: compare a route with artworks and a route without artworks, among visitors and residents.**
**No evaluation of this kind was found for an art park; it would show what art adds to the forest.**



City of Anyang; Seoul Shinmun 2019; Kim and Kim 2023; Booth-Kurpnieks 2020; Thomson et al. 2020 · Level: declarative cases and studies with no control group

HOW TO USE THESE FIGURES

# What is robust, what needs qualifying

## BUILD THE ARGUMENT ON THESE

1. The choice left to the occupant: in the office, the strongest gain comes from decoration chosen by the person who works there, and is lost when it is taken away (Knight and Haslam 2010).
2. Employees' preferences: only 6% prefer an office without a painting, 69% see an improvement in well-being from artworks. Commissioned surveys, but in agreement (Ifop for SFL 2024, Brookfield 2022).
3. The type of work: figurative images of nature do better than abstract art, in healthcare settings as in the office (Nanda 2011, Diette 2003, Kweon 2008).
4. The controlled experiments on looking: school visits allocated by lottery (10,912 pupils) and training the eye of medical students (Greene 2014, Gurwin 2018).

## CITE WITH CAUTION

1. The “+17%” and “+32%” productivity figures: figures from a press release, office enriched with plants and pictures, 112 and 47 participants. The effect of art is not isolated.
2. The cohorts on museum outings: mortality, dementia, loneliness. Associations on voluntary outings, not on artworks present in a place.
3. Commissioned studies: a landlord's survey, a museum's study of 20 people (“ten times stronger”), a foundation's reviews of asphalt art, with no control site.
4. The counts from schemes: 12,400 projects, 1,000 works, 26,085 works. They measure an activity; no effect on occupants has been evaluated.

**The first column stands up to due diligence. The second calls for a footnote.**
**Twenty-nine claims in circulation had to be set aside or qualified at the source; none appears as it stands on these slides.**

# A work acts when it is chosen, when it is looked at, when it serves the place.

## The right study, the right figure, the right level of evidence.

Seventy-two references, verified at the source, in nine fields. The effects exist, they are modest and depend on the type of work, the place and the share left to occupants.

That is the argument for art in property: not a slogan, a measurement.

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APPENDIX · NOT PRESENTED

# Sources and levels of evidence

**Every figure on this page comes from the original publication, verified online on 21 November 2026. Level: peer-reviewed literature, randomised trial, cohort, commissioned survey or case study. Full references, links and reservations in the report “Art and human behaviour”, v1.2.**

| FIGURE | VALUE | SOURCE | LEVEL |
|---|---|---|---|
| **Office decorated by its occupant** | productivity +32% · enriched office +17% · 112 and 47 participants | Knight and Haslam, 2010, J. Exp. Psychology: Applied | Experiment |
| **Preferences of office employees** | 6% “without a painting” · decoration cited by 25% · n = 1,300 | Ifop for SFL, 2024 | Commissioned survey |
| **Artworks in the office and well-being** | 69% see a positive effect · n = 3,000 | Brookfield Properties, 2022 | Commissioned survey |
| **Staircase of an office building** | signs +8.9% · music +8.9% · framed artworks with no reported effect | Kerr et al., 2004, Am. J. Health Promotion | Peer-reviewed |
| **Contested work on a plaza** | $175,000 · installed in 1981 · 1,300 signatures · removed in 1989 | Serra v. GSA, US Court of Appeals, 1988 | Case study |
| **Art image and product** | rating 5.41 versus 4.47 out of 7 · n = 100 | Hagtvedt and Patrick, 2008, J. Marketing Research | Peer-reviewed |
| **Painting in a hospital room** | no effect on anxiety, pain, length of stay · n = 186 | George et al., 2018 | Randomised trial |
| **Nature image during bronchoscopy** | pain control, odds ratio 4.76 · n = 80 | Diette et al., 2003, Chest | Randomised trial |
| **Cultural outings and mortality** | hazard ratio 0.69 (frequent), 0.86 (infrequent) · n = 6,710 · 14 years | Fancourt and Steptoe, 2019, BMJ | Cohort |
| **Viewing artworks and well-being** | 6 measures out of 42 better than control · 38 articles, 6,805 participants | Trupp et al., 2025, J. Positive Psychology | Systematic review |
| **Viewing time and school visit** | 27.2 s per work · critical thinking +9% of a standard deviation, n = 10,912 | Smith and Smith, 2001; Greene et al., 2014 | Observation · randomised |
| **Asphalt art and accidents** | vulnerable road users -50% · 13 accidents before, 6 after · 17 sites | Bloomberg Philanthropies, 2022 | Before-and-after |



*Sources verified online on 21 November 2026 (EXIMIUS REA). Set aside as unverifiable: BCA and IAPAA survey (78%, 64%), IAC and BCO report (93%), Clow and Fredhoi 2006 (lunchtime gallery visit), Ulrich, Lundén and Eltinge 1993 (conference abstract).*