

# Trends in social and cultural engagement measurement in the UK: socio-political context and practical research examples

Ula Tymoszuik, PhD

Centre for Performance Science, Royal College of Music | Imperial College London;  
Division of Psychiatry | Research Department of Epidemiology & Public Health, UCL

## Context of my research in the UK

- **2012** PhD project “social isolation and obesity” -> social support & body weight trajectories
- **2015** SOCCA forum launch
- **2016** MP Jo Cox’s (set up a cross-party Loneliness Commission) is murdered a week before the Brexit vote in the 2016 EU Referendum
- **2018** Minister for Loneliness (Tracy Crouch) is appointed, national consultations and strategies on loneliness follow, loneliness is widely-recognised and discussed as a societal and public health problem affecting most age groups / demographics

## Context of my research in the UK

- **(Forget developments since 2016 for a moment)**
- **2012** PhD project “social isolation and obesity” -> social support & body weight trajectories
- **2015** SOCCA forum launch
- (Entering the field of social relationships and health research through the lens of social epidemiology)

# I. Social measures

## SOCIAL NETWORKS, HOST RESISTANCE, AND MORTALITY: A NINE-YEAR FOLLOW-UP STUDY OF ALAMEDA COUNTY RESIDENTS

LISA F. BERKMAN<sup>1</sup> AND S. LEONARD SYME<sup>2</sup>

The relationship between social and community ties and mortality was assessed using the 1965 Human Population Laboratory survey of a random sample of 6928 adults in Alameda County, California and a subsequent nine-year mortality follow-up. The findings show that people who lacked social and community ties were more likely to die in the follow-up period than those with more extensive contacts. The age-adjusted relative risks for those most isolated when compared to those with the most social contacts were 2.3 for men and 2.8 for women. The association between social ties and mortality was found to be independent of self-reported physical health status at the time of the 1965 survey, year of death, socioeconomic status, and health practices such as smoking, alcoholic beverage consumption, obesity, physical activity, and utilization of preventive health services as well as a cumulative index of health practices.

health surveys; marriage; mortality; smoking; social class; social isolation

### Berkman & Syme 1979

## The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation

Roy F. Baumeister  
Case Western Reserve University

Mark R. Leary  
Wake Forest University

A hypothesized need to form and maintain strong, stable interpersonal relationships is evaluated in light of the empirical literature. The need is for frequent, nonaversive interactions within an ongoing relational bond. Consistent with the belongingness hypothesis, people form social attachments readily under most conditions and resist the dissolution of existing bonds. Belongingness appears to have multiple and strong effects on emotional patterns and on cognitive processes. Lack of attachments is linked to a variety of ill effects on health, adjustment, and well-being. Other evidence, such as that concerning satiation, substitution, and behavioral consequences, is likewise consistent with the hypothesized motivation. Several seeming counterexamples turned out not to disconfirm the hypothesis. Existing evidence supports the hypothesis that the need to belong is a powerful, fundamental, and extremely pervasive motivation.

### Baumeister & Leary 1995

## Social Relationships and Health

JAMES S. HOUSE, KARL R. LANDIS, DEBRA UMBERSON

Recent scientific work has established both a theoretical basis and strong empirical evidence for a causal impact of social relationships on health. Prospective studies, which control for baseline health status, consistently show increased risk of death among persons with a low quantity, and sometimes low quality, of social relationships. Experimental and quasi-experimental studies of humans and animals also suggest that social isolation is a major risk factor for mortality from widely varying causes. The mechanisms through which social relationships affect health and the factors that promote or inhibit the development and maintenance of social relationships remain to be explored.

has, however, been less clear. Does a lack of social relationships cause people to become ill or die? Or are unhealthy people less likely to establish and maintain social relationships? Or is there some other factor, such as a misanthropic personality, which predisposes people both to have a lower quantity or quality of social relationships and to become ill or die?

Such questions have been largely unanswerable before the last decade for two reasons. First, there was little theoretical basis for causal explanation. Durkheim (2) proposed a theory of how social relationships affected suicide, but this theory did not generalize to morbidity and mortality from other causes. Second, evidence of the association between social relationships and health, especially in general human populations, was almost entirely retrospective or cross-sectional before the late 1970s. Retrospective studies from death certificates or hospital records ascertained the nature of a

### House et al. 1988

## Social Ties and Susceptibility to the Common Cold

Sheldon Cohen, PhD; William J. Doyle, PhD; David P. Skoner, MD; Bruce S. Rabin, MD, PhD; Jack M. Gwaltney, Jr, MD

**Objective.**—To examine the hypothesis that diverse ties to friends, family, work, and community are associated with increased host resistance to infection.

**Design.**—After reporting the extent of participation in 12 types of social ties (eg, spouse, parent, friend, workmate, member of social group), subjects were given nasal drops containing 1 of 2 rhinoviruses and monitored for the development of a common cold.

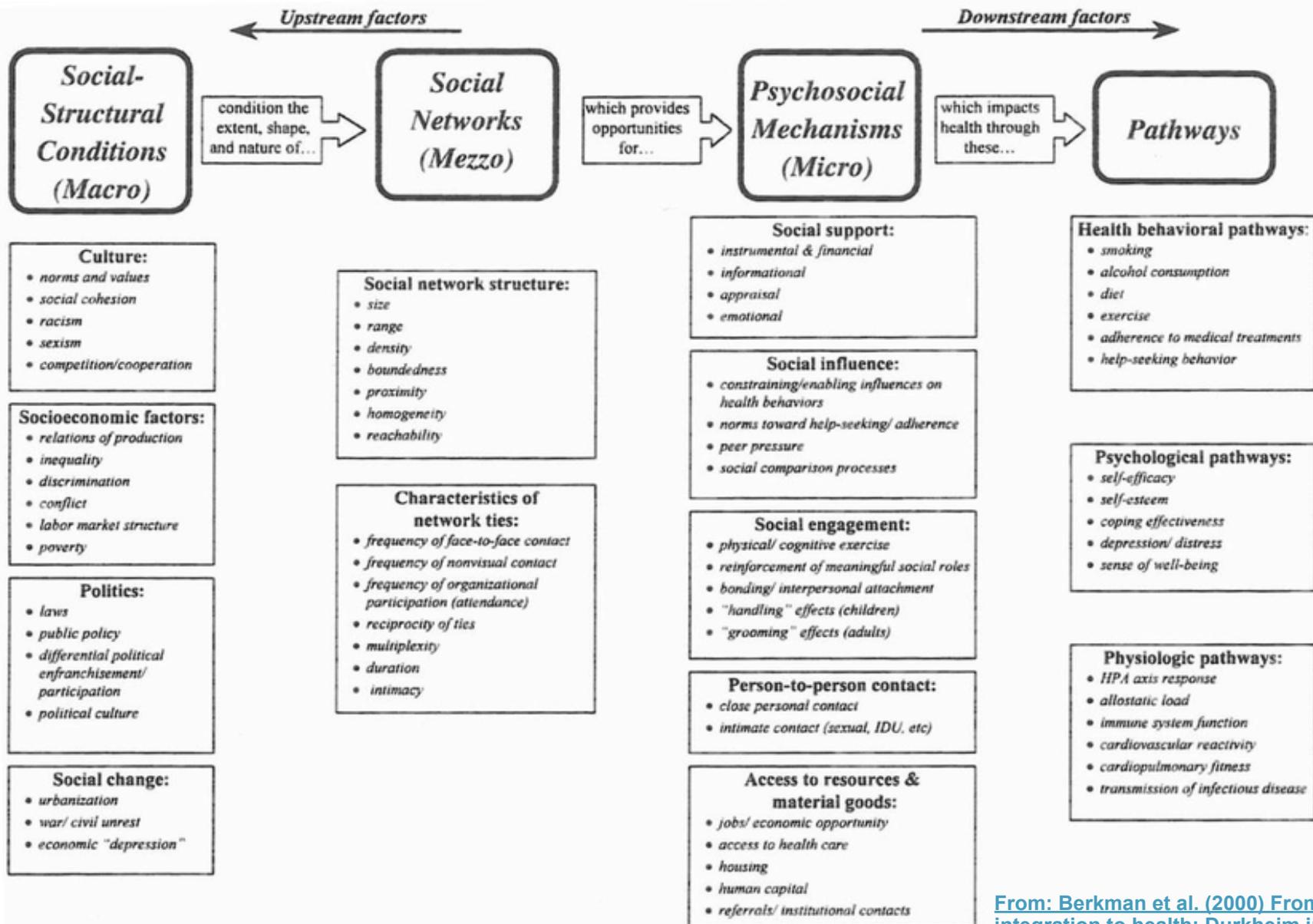
**Setting.**—Quarantine.

**Participants.**—A total of 276 healthy volunteers, aged 18 to 55 years, neither

basal levels of epinephrine, norepinephrine, and cortisol.<sup>10</sup> In turn, these hormones are thought to influence both cellular and humoral immune function and potentially to alter host resistance to infection.<sup>11,12</sup>

Although there is evidence for increased susceptibility to common colds among smokers<sup>13</sup> and decreased risk

### Cohen et al. 1997



From: [Berkman et al. \(2000\) From social integration to health: Durkheim in the new millennium](#)

# I. Social measures

Table 1  
Support-related concepts and definitions

Support-related concepts	Definitions
Social support	The social resources that persons perceive to be available or that are actually provided to them by nonprofessionals in the context of both formal support groups and informal helping relationships.
Social network	A unit of social structure composed of the individual's social ties and the ties among them.
Social integration	The extent to which an individual participates in private and public social interactions.
Functional support	The varied kinds of resources that flow through the network's social ties.
Structural support	The number and pattern of direct and indirect social ties that surround the individual.
Types of support	Emotional, instrumental, informational, companionate, and esteem support.
Perceived support	The individual's beliefs about the availability of varied types of support from network associates.
Received support	Reports about the types of support received.
Support adequacy	Evaluations of the quantity and/or quality of received support.
Directionality of support	Determination of whether support is unidirectional or bidirectional (mutual).

# I. Social measures

## How social relationships are measured/operationalised in the UK ageing cohorts

### Functional aspects

- **Received social support, incl. emotional, instrumental, informational, and negative exchanges** and in the workplace
- Childhood separation from the parent & sense of belonging/bonding
- Community belonging – social capital, trust, neighbourhood social cohesion, safety etc.
- Satisfaction with relationships – marital quality, closeness of certain social ties, e.g. family or children
- Loneliness

### Structural aspects

- Marital/relationship status
- Household size / family structure
- Frequency of visual and non-visual contact with different ties: family, friends
- Civic and organised groups participation, e.g.: voting, cultural groups, religious groups, sports/hobby groups
- Socialising / organising social gatherings
- Volunteering/Informal caring

# I. Social measures

## PhD data collection on bariatric surgery patients

### Functional aspects

- Received social support, incl. emotional, practical, and negative exchanges (Close Persons Questionnaire)
- Providing support to others (Krause et al.) incl. emotional and practical support
- Satisfaction with marital relationship
- Satisfaction with the relationship with the closest person

### Structural aspects

- Marital/relationship status
- Number of relatives seen once a month or more
- Number of friends seen once a month or more

# I. Social measures

## PhD study on bariatric surgery patients

Figure 1 Associations between pre-surgery social support levels and post-surgery weight loss derived from linear regression models, 2014-2017, UK.

	3 months %TWL (n = 133)		12 months %TWL (n = 130)		24 months %TWL (n = 101)	
	$\beta$ (SE)	p	$\beta$ (SE)	p	$\beta$ (SE)	p
Received emotional support	0.16 (0.09)	0.08	<b>0.37 (0.18)</b>	<b>0.042</b>	<b>0.60 (0.30)</b>	<b>0.048</b>
Received practical support	<b>0.26 (0.14)</b>	<b>0.054</b>	0.47 (0.28)	0.09	0.72 (0.44)	0.10
Number of friends seen per month (ref none)						
1-5 friends	<b>2.96 (1.36)</b>	<b>0.032</b>	5.01 (3.14)	0.11	<b>9.23 (4.31)</b>	<b>0.035</b>
6+ friends	<b>3.33 (1.41)</b>	<b>0.020</b>	5.08 (3.20)	0.11	7.90 (4.42)	0.08
Number of relatives seen per month (ref none)						
1-5 relatives	0.43 (1.28)	0.74	-1.21 (3.02)	0.69	-3.28 (3.75)	0.39
6+ relatives	0.32 (1.29)	0.81	-0.70 (3.03)	0.82	-5.41 (3.76)	0.15

Models adjusted for: days since surgery at each time point, gender, age, ethnicity, employment, self-esteem and mastery

Iyimoszuk et al. 2018. Is Pre-operation Social Connectedness Associated with Weight Loss up to 2 Years Post Bariatric Surgery?

	1 month (n = 152)		3 months (n = 136)		6 months (n = 123)	
	$\beta$ (SE)	p	$\beta$ (SE)	p	$\beta$ (SE)	p
Providing emotional support	<b>0.14 (0.06)</b>	<b>0.023</b>	<b>0.24 (0.08)</b>	<b>0.005</b>	<b>0.23 (0.12)</b>	<b>0.053</b>

Models adjusted for: days since surgery at each time point, gender, age, ethnicity, employment, self-esteem and mastery

Tyimoszuk et al. 2017. The association between social support and weight outcomes in the general population and in bariatric surgery patients

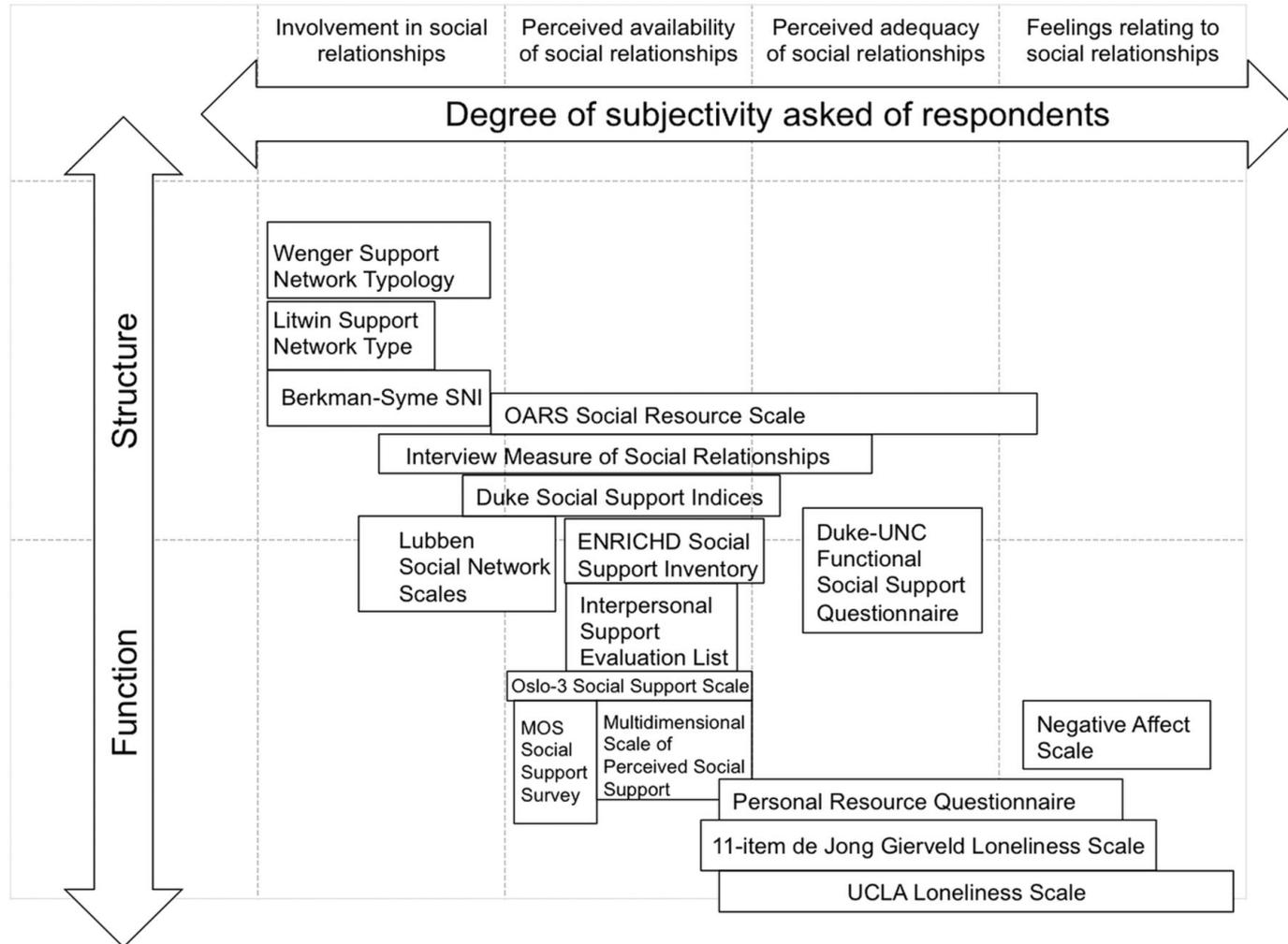
# I. Social measures

- PhD thesis – used it as an opportunity to challenge common conceptualisations of social support (always assumed as *received*) and (ideally) connect dots between in particular *functional* aspects of social relationships

*“Future studies, for example, should attempt to determine whether health problems previously attributed to social isolation (House et al., 1988) and loneliness (Hawkley and Cacioppo, 2010) are due, in part, to lack of engagement of the caregiving system. In our view, this is a worthy venture not only because it may help resolve longstanding issues related to the health benefits of social contact – for example, whether it is better to give or to receive social support (Thomas, 2010) – but also because it may help clarify the roles of neuropeptides in regulating stress.”*

(Brown and Brown, 2015, p.12)

# I. Social measures



## Context of my research in the UK

- **2016** MP Jo Cox's (set up a cross-party Loneliness Commission) is murdered a week before the Brexit vote in the 2016 EU Referendum
- **2018** Minister for Loneliness (Tracy Crouch) is appointed, national consultations and strategies on loneliness follow, focus from loneliness in older adults shifts to include also young people and other vulnerable groups



# I. Social measures

## Loneliness and Social Isolation as Risk Factors for Mortality: A Meta-Analytic Review

Julianne Holt-Lunstad<sup>1</sup>, Timothy B. Smith<sup>2</sup>, Mark Baker<sup>1</sup>, Tyler Harris<sup>1</sup>, and David Stephenson<sup>1</sup>

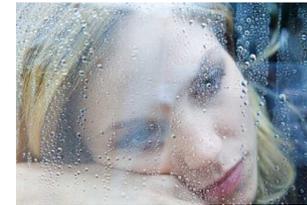
<sup>1</sup>Department of Psychology and <sup>2</sup>Department of Counseling Psychology, Brigham Young University

Perspectives on Psychological Science  
2015, Vol. 10(2) 227–237  
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DOI: 10.1177/1745691614568352  
pps.sagepub.com  


[WEBMD HEALTH NEWS]

## Loneliness Rivals Obesity, Smoking as Health Risk

By Nick Tate



## Contribution of risk factors to excess mortality in isolated and lonely individuals: an analysis of data from the UK Biobank cohort study

Marko Elovainio, Christian Hakulinen, Laura Pulkki-Råback, Marianna Virtanen, Kim Josefsson, Markus Jokela, Jussi Vahtera, Mika Kivimäki

Loneliness is killing us - we must start treating this disease  
*Philippa Perry*



The New York Times

*Researchers Confront an Epidemic of Loneliness*

# Social relationship research in the UK after 2016



Office for National Statistics

Compendium

**National Measurement of Loneliness: 2018**

This compendium provides comprehensive information on the loneliness measurement landscape, the recommended national indicators of loneliness and the question testing underpinning our recommendations.

**Children's and young people's experiences of loneliness: 2018**

Analysis of children's and young people's views, experiences and suggestions to overcome loneliness, using in-depth interviews, the Community Life Survey 2016 to 2017 and Good Childhood Index Survey, 2018.

GOV.UK

Search on GOV.UK

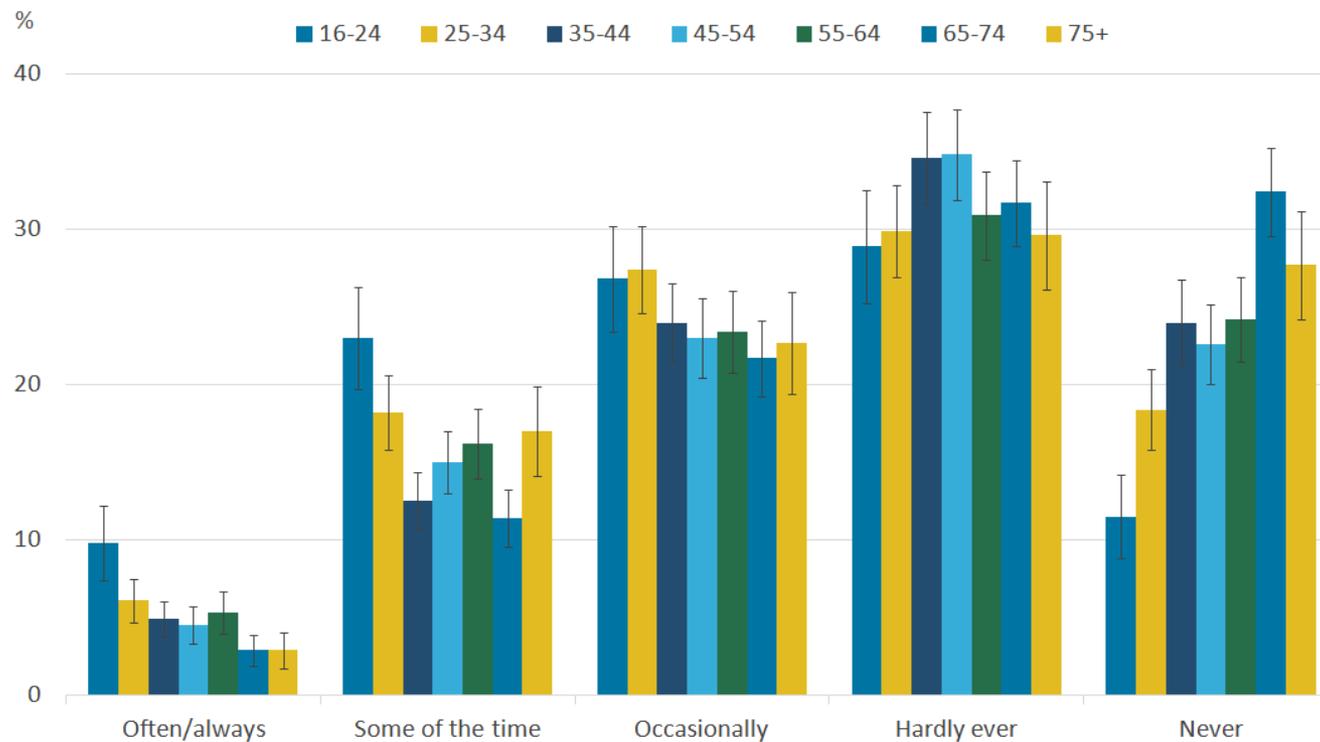
Departments Worldwide How government works  
Consultations Statistics News and comments

Press release  
**£11.5 million fund to tackle loneliness across England**

Tens of thousands of people experiencing loneliness to benefit from new £11.5m fund

# I. Social measures

Fig. Reported frequency of loneliness by age group, 2016-2017, England



# I. Social measures

**LIVE**  
 Saturday Live
 

 Schedule
 

## The Anatomy of Loneliness

Home
Episodes
Clips

**Available now**

42:00

**Episode 3**

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**All available episodes (3 total)**

Claudia Hammond analyses the results of the BBC Loneliness Experiment.

**Nine ways to feel less lonely**

Claudia Hammond presents tips for tackling loneliness.

**BBC Loneliness Experiment results**

Claudia Hammond presents the findings of the world's largest loneliness study.

2:27

**Is loneliness affecting your health?**

Claudia Hammond explains that loneliness can be bad for your physical and mental health.

2:30

**Who feels lonely?**

Claudia Hammond reveals the results of the 2018 BBC Loneliness Experiment.

# I. Social measures

The work on social concepts continued – this time with focus on loneliness & social isolation

**Table 1** Social isolation and related concepts: conceptual framework

Established concepts relating to social isolation or loneliness	Domains included in the existing concepts relating to social isolation or loneliness					
	Network			Appraisal of relationships		Other domains (not directly related to social isolation or loneliness)
	Quantity	Structure	Quality	Emotional	Resources	
Social isolation	×		×	×	×	
Loneliness				×		
Social support	×	×		×	×	
Social network	×	×	×			
Social capital (individual)				×	×	Ecological social capital, negative social capital
Confiding relationships and related concepts			×			Negative aspects of relationships
Alienation				×		Powerlessness, normlessness

[Wang et al., 2017. Social isolation in mental health: a conceptual and methodological review](#)

**Useful resource:** UKRI's Loneliness and Social Isolation in Mental Health Network (MHLoneliness) and their [newsletter](#)

# II. Cultural engagement measures

All-Party Parliamentary Group  
on Arts, Health and Wellbeing  
Inquiry

## Creative Health: The Arts for Health and Wellbeing

The Short Report

July 2017

appg

## Tackling Loneliness in Older Age – The Role of the Arts

David Cutler  
The Baring Foundation

Campaign to  
End Loneliness  
CONNECTIONS IN OLDER AGE

## Measuring Cultural Engagement:

A Quest for New Terms, Tools,  
and Techniques

Summary of a Joint Research Symposium titled "Measuring Cultural Engagement amid Confounding Variables: A Reality Check," held at the Gallup headquarters in Washington, DC, June 2-3, 2014.

Co-sponsored by the National Endowment for the Arts and the Arts & Humanities Research Council's Cultural Value Project.

ART WORKS.

National Endowment for the Arts

Arts & Humanities Research Council

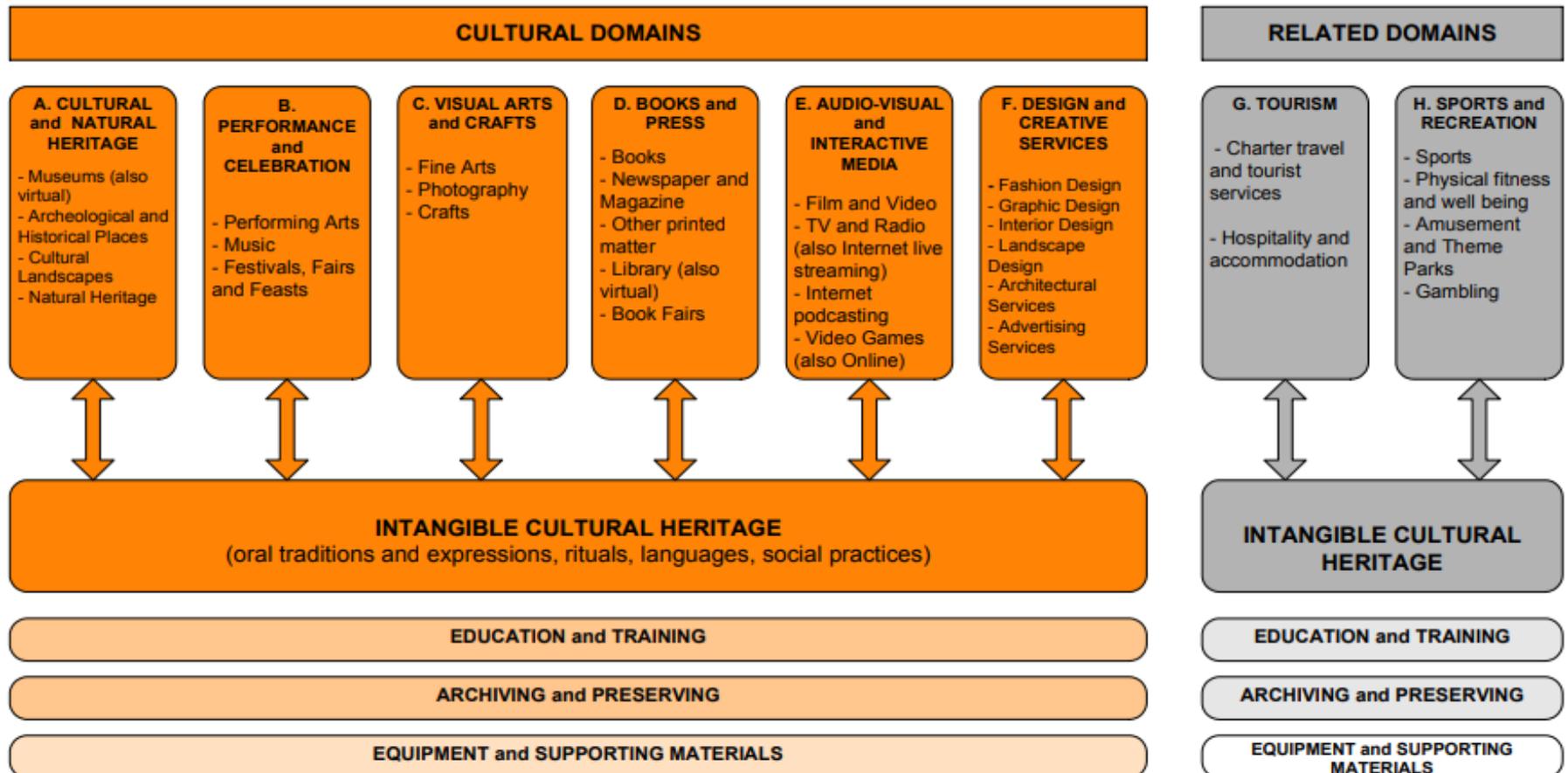
## II. Cultural engagement measures

### 2006 UNESCO Guidelines for Measuring Cultural Participation

1. **Artistic and monumental heritage:**
  - Historical monuments
  - Museums
  - Archaeological sites
  - Other heritage
2. **Archives**
3. **Libraries**
4. **Books and press:**
  - Books
  - Newspapers and periodicals
5. **Visual arts:**
  - Visual arts (incl. design)
  - Photography
  - Multidisciplinary
6. **Architecture**
7. **Performing arts:**
  - Music
  - Dance
  - Music theatre
  - Drama theatre
  - Multidisciplinary
  - Other (circus, pantomime, etc.)
8. **Audio and visual media/multimedia:**
  - Film
  - Radio
  - Television
  - Video
  - Audio records
  - Multimedia

# II. Cultural engagement measures

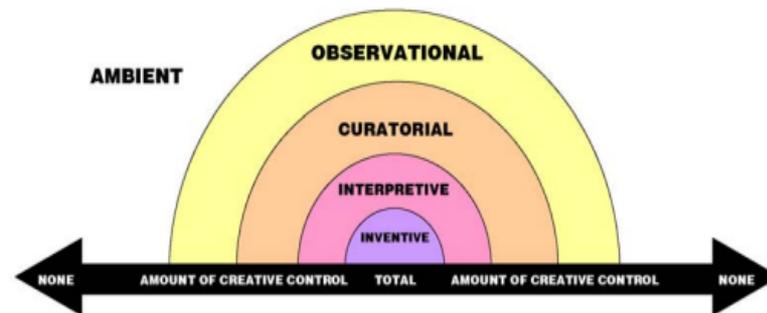
## 2009 UNESCO framework for cultural statistics definition



## II. Cultural engagement measures

Well-established practise of separating participatory vs receptive engagement

### Five Modes of Arts Participation



1. **Inventive Participation** refers to activities that involve creating new, original work (e.g., composing music, writing original poetry, painting).
2. **Interpretive Participation** refers to learning and interpreting art (e.g., playing in a band, learning to dance, taking acting lessons).
3. **Curatorial Participation** refers to activities that involve selecting, organizing or collecting art (e.g., downloading music and burning CDs, making playlists, collecting art).
4. **Observational Participation** encompasses arts experiences that involve viewing or watching art created or performed by others. We define two sub-types of observational participation: 1) participation in live events, and 2) media-based participation.
5. **Ambient Participation** (not investigated in this study) refers to art experiences that occur without forethought (e.g. hearing music in a hotel lobby, seeing architecture).

## II. Cultural engagement measures

Figure 6. From “Getting In on the Act: How Arts Groups Are Creating Opportunities for Active Participation” (Brown, Novak-Leonard & Gilbride, 2011)

### THE AUDIENCE INVOLVEMENT SPECTRUM

RECEPTIVE



#### SPECTATING

Spectating is fundamentally an act of receiving a finished artistic product. It is therefore outside the realm of participatory arts practice.



#### ENHANCED ENGAGEMENT

Educational or “enrichment” programs may activate the creative mind, but for the most part do not involve creative expression on the part of the audience member.

PARTICIPATORY



#### CROWD SOURCING

Audience becomes activated in choosing or contributing towards an artistic product.

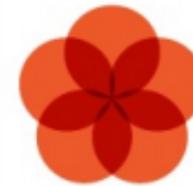
- *Youth mosaics*
- *Photography contests*
- *An opera libretto comprised of Tweets*
- *Virtual choruses*



#### CO-CREATION

Audience members contribute something to an artistic experience curated by a professional artist.

- *Participatory theater*
- *Pro/Am concerts*
- *Storytelling events*
- *Participatory public art*



#### AUDIENCE-AS-ARTIST

Audience members substantially take control of the artistic experience; focus shifts from the product to the process of creation.

- *Public dances*
- *Community drawing contests*

## II. Cultural engagement measures

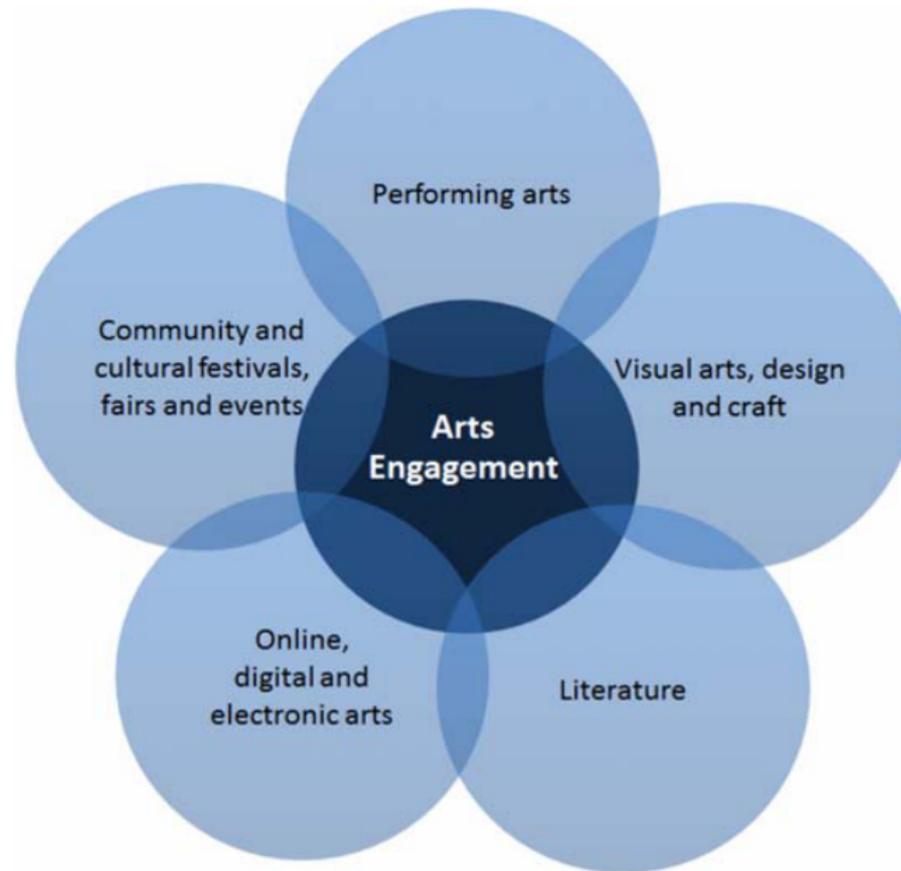


Figure 1. Arts Engagement as Represented by Five Art Forms.

## II. Cultural engagement measures

- Availability in the UK's cohort studies
  - ***The Taking Part Survey***: an ongoing face to face household survey of adults aged 16+ and children aged 5 to 15 years old in England. Run since 2005.
  - ***Understanding Society***: questions on adult's engagement with arts and culture adapted from *Taking Part* were included in wave 2 (2010-2012) and wave 5 (2013-2015).
  - ***ELSA***: a limited number of questions on cultural engagement asked at every study wave.

## II. Cultural engagement measures

### Participatory engagement

In the last 12 months, have you done any of these activities?

1. Dance, including ballet
2. Sang to an audience or rehearsed for a performance (not karaoke)
3. Played a musical instrument
4. Written music
5. Rehearsed or performed in a play/drama, opera/opera or musical theatre
6. Taken part in a carnival or street arts event (e.g. as a musician, dancer or costume maker)
7. Learned or practised circus skills
8. Painting, drawing, printmaking or sculpture
9. Photography, film or video making as an artistic activity (not family or holidays)
10. Used a computer to create original artworks or animation
11. Textile crafts, wood crafts or any other crafts, such as embroidery, knitting, wood turning, furniture making, pottery or jewellery
12. Read for pleasure (not newspapers, magazines or comics)
13. Written any stories, plays or poetry
14. Been a member of a book club, where people meet up to discuss and share books

**Rating:** 1) At least once a week; 2) Less often than once a week but at least once a month; 3) Less often than once a month but at least 3 or 4 times a year; **4)** Twice in the last 12 months; 5) Once in the last 12 months

## II. Cultural engagement measures

### Receptive engagement

In the last 12 months, have you been to any of these events?

1. Film at a cinema or other venue
2. Exhibition or collection of art, photography or sculpture or a craft exhibition (not crafts market)
3. Event which included video or electronic art
4. Event connected with books or writing
5. Street arts or a public art display or installation (art in everyday surroundings, or an art work such as sculpture that is outdoors or in a public place)
6. Carnival or culturally specific festival (for example, Mela, Baisakhi, Navrati, Feis)
7. Circus (not animals)
8. Play/drama, pantomime or a musical
9. Opera/opera
10. Classical music performance
11. Rock, pop or jazz performance
12. Ballet
13. Contemporary dance
14. African people's dance or South Asian and Chinese dance
15. Used a public library service
16. Been to an archive centre or records office
17. Visited a museum or gallery
18. Visited a museum or gallery

**Rating:** 1) At least once a week; 2) Less often than once a week but at least once a month; 3) Less often than once a month but at least 3 or 4 times a year; **4)** Twice in the last 12 months; 5) Once in the last 12 months

## II. Cultural engagement measures

### Other (receptive?) cultural/heritage engagement

Here is a list of types of historical sites. Please tell me which ones you have visited in the last 12 months?

Please only include activities done in your own time or for the purpose of voluntary work or for academic study.

1. A city or town with historic character
2. A historic building open to the public (non-religious)
3. A historic park or garden open to the public
4. A place connected with industrial history (e.g. an old factory, dockyard or mine) or historic transport system (e.g. and old ship or railway)
5. A historic place of worship attended as a visitor (not to worship)
6. A monument such as a castle, fort or ruin
7. A site of archaeological interest (e.g. Roman villa, ancient burial site)
8. A site connected with sports heritage (e.g. Wimbledon) (not visited for the purposes of watching sport)

**Rating:** 1) At least once a week; 2) Less often than once a week but at least once a month; 3) Less often than once a month but at least 3 or 4 times a year; **4)** Twice in the last 12 months; 5) Once in the last 12 months

## II. Cultural engagement measures - critique

### Inconsistencies identified as part of the HEartS project:

1. Studies often include more *receptive engagement* vs. *participatory engagement* items
  - a bias toward “highbrow” and “formal” interpretation of arts made or performed by highly skilled creators and state-sponsored art forms (e.g. ELSA) which leads to underestimation of amateur, every day arts engagement in the population e.g:
    - Inclusion of a “reading for pleasure” item = 76% of adults in England participated in at least one arts activity (Understanding Society 2013/2014) vs. 37.7% (*Taking Part*)
    - Broader definition of cultural engagement = 11% are disengaged from most mainstream leisure and culture *Taking Part* (2005/2006-2010/2011) vs. 89.7% “disengaged” with participatory performing, visual and literary arts (*Understanding Society* 2010-2012)
2. Assessment in ongoing national surveys is **out of sync with trends** in digital, on-demand video and audio content engagement such as music streaming services, podcasts and audiobooks, e.g:
  - **none** of the cohort studies measure **listening to recorded music!**

## II. Cultural engagement measures - critique

3. Inconsistencies in engagement definitions due to explicit mentions of: **the scope or modes of art production** and **specific art genres**, e.g.:
  - Reading for pleasure excludes reading “newspapers, magazines or comics”
  - Visits to arts and crafts exhibitions excludes “crafts markets”
  - Dance engagement uses a single example of dance genre: “Dance, including ballet”
  - Attending musical performances specifies “classical music” and “rock, pop or jazz”;
  - “Used a computer to create original artworks or animation” or “Written any stories, plays or poetry”)
  - **most mentions/exclusions reinforce “highbrow”/“formal”, “state-sponsored arts” bias**
  
4. Inconsistencies in engagement definitions due to explicit mentions of: **social context** or **setting** in which engagement occurs, e.g.:
  - “Been a member of a book club, where people meet up to discuss and share books”
  - “Taken part in a carnival or street arts event (e.g. as a musician, dancer or costume maker)”

## II. Cultural engagement measures

UK-wide online HEartS Survey n=5,338

### Participatory arts engagement

1. Read as a past-time activity
2. Written as a past-time activity
3. Attended a book club
4. Played a musical instrument or sang
5. Written or created music
6. Practised or performed dance
7. Practised or performed a play, drama
8. Done photography, film, video etc.
9. Done painting, drawing etc.
10. Done any crafts or decorative arts

### Receptive arts engagement

1. Been to a literary event
2. Listened to audio books or podcasts
3. Been to live music
4. Listened to recorded music
5. Been to live dance
6. Been to live theatre or circus
7. Watched a film or drama at a cinema
8. Been to exhibition, museum etc.
9. Been to crafts or decorative arts fair
10. Been to street art, public art displays

## II. Cultural engagement measures

*Arts activities listed from most to least popular with their respective frequency of engagement and social context of engagement, UK-wide online HEartS Survey n=5,338.*

			Any Engagement*	Daily/ Weekly	Monthly/ Every few months	One off/ Once/ twice a year	Mainly with others	Alone and with others	Mainly alone
1	P	Read as a past-time activity	85.22%	50.06%	21.86%	13.30%	2.11%	12.0%	85.89%
2	R	Listened to recorded music	82.52%	58.30%	16.11%	8.11%	9.08%	40.50%	50.42%
3	R	Watched a film or drama at a cinema	75.70%	7.06%	41.12%	27.52%	58.45%	30.44%	11.11%
4	R	Been to live music	66.45%	4.42%	24.75%	37.28%	62.25%	26.81%	10.94%
5	R	Been to an exhibition, museum etc.	66.04%	3.52%	22.86%	39.66%	53.42%	33.16%	13.42%
6	R	Been to live theatre or circus	61.95%	3.30%	17.29%	41.36%	63.26%	27.76%	8.98%
7	R	Listened to audio books or podcasts	49.18%	16.82%	16.65%	15.70%	5.07%	19.35%	75.58%
8	R	Been to street art, public art displays	48.69%	3.18%	16.37%	29.13%	50.17%	35.63%	14.20%
9	P	Done photography, film, video etc.	44.49%	11.05%	18.34%	15.10%	13.52%	39.62%	46.86%
10	P	Done any crafts or decorative arts	43.76%	10.47%	15.89%	17.40%	15.11%	32.32%	52.57%

P= participatory arts; R= receptive arts; \* Any engagement = *One-off* or more frequently

## II. Cultural engagement measures

*Arts activities listed from most to least popular with their respective frequency of engagement and social context of engagement, UK-wide online HEartS Survey n=5,338.*

			Any Engagement*	Daily/ Weekly	Monthly/ Every few months	One off/ Once/ twice a year	Mainly with others	Alone and with others	Mainly alone
11	P	Written as a past-time activity	43.82%	10.85%	15.81%	17.16%	3.98%	17.44%	78.58%
12	P	Played a musical instrument or sang	41.16%	15.64%	11.45%	14.07%	17.30%	35.23%	47.47%
13	R	Been to live dance	38.97%	4.11%	11.46%	23.40%	52.50%	33.03%	14.47%
14	R	Been to crafts or decorative arts fair	38.82%	2.87%	11.71%	24.24%	46.48%	37.21%	16.32%
15	P	Done painting, drawing etc.	37.84%	7.94%	14.37%	15.53%	12.82%	30.74%	56.44%
16	R	Been to a literary event	31.88%	3.13%	9.24%	19.52%	28.08%	38.54%	33.37%
17	P	Practised or performed dance	26.26%	5.53%	7.61%	13.13%	32.24%	40.66%	27.10%
18	P	Attended a book club	24.20%	3.48%	9.25%	11.46%	45.36%	31.73%	22.91%
19	P	Practised or performed a play, drama	22.29%	3.32%	5.62%	13.35%	23.19%	38.99%	23.19%
20	P	Written or created music	21.23%	4.93%	7.10%	9.20%	12.36%	33.63%	54.02%

P= participatory arts; R= receptive arts; \* Any engagement = *One-off* or more frequently

## II. Cultural engagement measures

- You can find out more about the HEartS survey publications on the Centre for Performance Science [website](#):
- Dataset available on [Dryad](#) under: “*HEartS Survey 2019: Charting the Health, Economic, and Social impact of the ARTs*”

### III. UK-Japan SWAN collaboration

- Why is this important in the context of cross-cultural collaborations?
  - National socio-political climates matter in epidemiological research and it can be useful to: i) reflect on the timing and reasons behind the emergence of certain research “hot topics” and how they influence the course of the wider academic discipline as well as to ii) trace the history of routinely-used measurement instruments and chart their potential evolution to keep them more aligned with societal trends