

## **Digital, Culture, Media and Sport Committee inquiry: Social impact of participation in culture and sport**

### **Written evidence submitted by CLOSER, the UK longitudinal studies consortium**

#### **1. Summary**

- 1.1 CLOSER is a unique collaboration of leading social and biomedical longitudinal studies, the British Library and the UK Data Service, funded by the Economic and Social Research Council (ESRC) and the Medical Research Council (MRC).
- 1.2 Longitudinal data has several advantages when it comes to assessing the impact of engagement with the arts, culture and sport. In particular, the fact that study participants are tracked over time (often from early life into adulthood) makes it possible to build up evidence about the long-term consequences of earlier experiences and to assess how behaviour changes as people's circumstances change. The studies typically collect a rich array of information, allowing insights into how different areas of life intersect.
- 1.3 Longitudinal evidence from the CLOSER studies has demonstrated a number of health benefits from participation in the arts, cultural activities and sports. Evidence from longitudinal studies found a significant association between engaging in arts and culture and a positive long-term effect on health and longevity. Engaging children in sports from a young age significantly increases the likelihood of them being physically active in later life. Longitudinal data has also been used to demonstrate a positive link between arts activities and increased wellbeing and self-esteem and that attending cultural or sports events was the largest predictor of civic engagement.
- 1.4 There is untapped potential contained within existing, publicly-funded longitudinal datasets which allow us to explore relationships between culture and sports engagement and participation and personal and societal outcomes. Linking longitudinal survey data to health records and investing in harmonising data to enable comparisons over time and across generations would also greatly enhance the evidence base.

#### **2. About CLOSER**

- 2.1 CLOSER is a unique collaboration of leading social and biomedical longitudinal studies, the British Library and the UK Data Service, funded by the Economic and Social Research Council (ESRC) and Medical Research Council (MRC). [1]
- 2.2 There are currently eight studies in the CLOSER Partnership, comprising four national and three regional birth cohort studies and Understanding Society (the UK Household Longitudinal Study). [2]

2.3 Longitudinal studies follow the same people and households over time, often from birth, collecting a wide array of information about participants' lives and enabling researchers and policymakers explore how changes in society affect health, community and education.

2.4 CLOSER's mission is to maximise the use, value and impact of longitudinal studies to help improve our understanding of key social and biomedical challenges, including how best to combat life threatening diseases, reduce obesity and improve social mobility and life chances.

### 3. Longitudinal evidence

3.1 Research using UK longitudinal studies has looked at the relationship between arts engagement and health. In particular, data from the 1970 British Cohort Study, Millennium Cohort Study, English Longitudinal Study of Ageing and Understanding Society have been used to uncover the positive impact of engaging with arts and sports on participants' health and quality of life. The Taking Part survey, operated by the (then) Department for Culture, Media and Sport in collaboration with cultural and sporting partners is another source of relevant evidence as it contains a longitudinal element in its design. [3]

3.2 Engaging children in sports from a young age significantly increases the likelihood of them being physically active in later life, according to research based on the 1970 British Cohort Study. This study found that children who often took part in sport at age 10 were much more likely to participate in physical activities in later life. Interestingly there was no association between active outdoor play in childhood and involvement in sporting activities 32 years later, which suggests that childhood activity interventions might best achieve lasting change by promoting sports engagement rather than active outdoor play. [4]

3.3 Research using the Millennium Cohort Study found that participating in organised sports and joining after school clubs can help to improve primary school children's academic performance and social skills. Children taking part in organised sports and physical activities at the ages of 5, 7 and 11 were almost one and a half times more likely to reach a higher than expected level in their Key Stage 2 (KS2) maths test at age 11. Among disadvantaged children, those who attended after school clubs also performed better than their peers who did not take part in such groups. They achieved, on average, a 2-point higher total score in their KS2 assessments in English, maths and science at the end of primary school. The research also discovered that children who participated in organised sports and physical activities at any time during primary school had better social, emotional and behavioural skills than those who did not take part. This was also the case for disadvantaged children who had attended an after school club during primary school, compared with other poorer children who had never joined one. [5]

3.4 Evidence from eight longitudinal studies found a significant association between engaging in arts and culture and a positive long-term effect on health and longevity. The evidence from these studies suggest that attending high-quality cultural events has a beneficial impact upon a range of chronic diseases over time. This includes cancer, heart disease, dementia and obesity, with an inevitable knock-on effect upon life expectancy. [6]

3.5 Research using data from Understanding Society found that attending cultural or sports events was the largest predictor of civic engagement and that young people who said they went “often” to the theatre, ballet, classical music concerts, museums, art galleries or sports events were 65% more likely to take part in voluntary work than those who went less often. [7]

3.6 Understanding Society has also been used to demonstrate a positive link between arts activities and increased wellbeing and self-esteem. Commissioned as part of the CASE (Culture and Sport Evidence) programme with the Arts Council England, this research explored the potential of the Understanding Society surveys to help build an understanding of relationships between culture and sports engagement and the health and wellbeing of adults in England. Results for adults showed that increasing culture and sports engagement over time was linked to improved wellbeing for participants, results for young people showed better health and wellbeing for those who frequently engaged in sports and higher levels of happiness and self-esteem for young people who engaged in arts activities. [8]

#### **4. Evidence gaps**

4.1 ‘The value of arts and culture to people and society – an evidence review’, commissioned by the Arts Council England, focuses on the impact that arts and culture have on the economy, health, wellbeing, society and education. This report underlines the need for more longitudinal studies to examine the health benefits of participation in arts and culture, and comparative research to tease out the effects of participation of different types of activity. [9]

4.2 ‘Creative Health: The arts for health and wellbeing’, commissioned by the All-Party Parliamentary Group on Arts, Health and Wellbeing echoes this recommendation, stating “there is a pressing need for longitudinal research into the relationship between arts engagement, health and wellbeing.” The report calls for long-term questions about arts and cultural engagement to be included in major UK longitudinal studies in the future and for these questions to be stable over time to enable longitudinal research. [10]

#### **5. Recommendations**

5.1 There is considerable potential for making more use of the UK’s rich longitudinal studies to improve the evidence base and therefore enable a better understanding of the long-term impact of cultural and sporting pursuits on our individual and collective health in different contexts and in different settings.

5.2 More investment is required to enable comparisons across different longitudinal studies to provide a window into the impact of participation across and within generations. The ability to compare findings from different longitudinal studies can only be achieved through harmonising survey variables to ensure the data is comparable – something that CLOSER is investing heavily in. [11]

5.3 Linking longitudinal studies to health records in the UK (which has been achieved in Nordic research [12]) would provide a more complete picture of participants' life stories and vastly improve our understanding of the impact of participation in culture and sport.

## 6. About the CLOSER studies

6.1 The **Hertfordshire Cohort Study** comprises a nationally unique study of 3,000 men and women born during the period 1931-1939 and still resident in the English county of Hertfordshire during the 1990s. The principal objective of the study is to evaluate the relationship between early (prenatal and early postnatal) growth, genetic influences, adult lifestyle and the risk of common age-related disorders such as osteoporosis, osteoarthritis, sarcopenia, type 2 diabetes and cardiovascular disease. The study has been a key source of evidence for lifecourse influences on health and disease in later life.

6.2 The **1946 MRC National Survey of Health and Development** is the oldest and longest running of the British birth cohort studies comprising of men and women born in England, Scotland or Wales in March 1946. Today, with study members in their seventies, the study is a leading source of evidence on the long-term biological and social processes of ageing and how ageing is affected by factors acting across the whole of life.

6.3 The **1958 National Child Development Study** follows the lives of 17,415 people born in England, Scotland and Wales in a single week of 1958. It has tracked the lives of study members to reveal how the different educational and other paths people take affect their wages, jobs, relationships, and health later in life. It has also been used to uncover genetic risks for a range of diseases.

6.4 The **1970 British Cohort Study** follows the lives of 17,198 people born in England, Scotland and Wales in a single week of 1970. The study has shown the importance of reading for pleasure for children's cognitive development, especially in vocabulary and spelling, but also in maths.

6.5 The **Avon Longitudinal Study of Parents and Children** charts the lives of 14,500 people born in the former county of Avon between April 1991 and December 1992 as well as the lives of their parents and their children. It is rich resource for the study of the environmental and genetic factors that affect a person's health and development throughout their life.

6.6 The **Southampton Women's Survey** is the only birth cohort study in Europe in which the mothers were recruited before conception of the child. The aim of the study is to assess the influence of maternal dietary, lifestyle, intrauterine, genetic and epigenetic factors on the children's health and development, and on the health of the mothers themselves.

6.7 The **Millennium Cohort Study** follows the lives of 19,517 children born across England, Scotland, Wales and Northern Ireland in 2000-01. The study has provided important evidence to show how circumstances in the early stages of life can influence later health and development, including that children who are breastfed tend to be healthier and to show better

cognitive development and that children born in the summer months were more likely to be placed in lower ability groups than their autumn-born peers.

6.8 **Understanding Society:** The UK Household Longitudinal Study follows the lives of all individuals within 40,000 households over time. It covers the whole population, with boost samples to ensure it is representative of immigrant and ethnic minority groups, and its large sample enables sub-population groups to be examined. The study includes data on key domains of people’s lives – their family, health, wellbeing, employment, education, income, expenditure, wealth, time use, behaviours, housing, transport and neighbourhoods, attitudes and beliefs – which enables researchers to investigate the inter-relations between different aspects of people’s lives.

## 7. References

- [1] <https://www.closer.ac.uk/about/>
- [2] <https://www.closer.ac.uk/about/partners/>
- [3] <https://www.gov.uk/guidance/taking-part-survey>
- [4] <https://www.closer.ac.uk/news-opinion/2015/playing-sports-in-childhood-can-make-adults-more/>
- [4] Association between participation in outdoor play and sport at 10 years old with physical activity in adulthood by Smith, L. et al (2015), published in *Preventive Medicine*:  
<http://dx.doi.org/10.1016/j.ypmed.2015.02.004>
- [5] <http://www.cls.ioe.ac.uk/news.aspx?itemid=4428&itemTitle=Out+of+school+activities+improve+children%e2%80%99s+educational+attainment%2c+study+reveals&sitesectionid=27&sitesectiontitle=News&returnlink=news.aspx%3fsitesectionid%3d27%26sitesectiontitle%3dNews%26page%3d9>
- [6] <https://www.understandingsociety.ac.uk/2015/02/23/exploring-relationship-between-arts-and-health>
- [7] <https://www.understandingsociety.ac.uk/2014/03/25/understanding-society-key-in-looking-at-the-value-of-arts-and-culture>
- [7] <https://www.understandingsociety.ac.uk/2013/04/17/theatre-and-art-are-best-way-to-encourage-model-citizens>
- [8] <http://natcen.ac.uk/our-research/research/culture-sport-and-wellbeing/>
- [9] <http://www.artscouncil.org.uk/what-we-do/research-and-data/value-arts-and-culture-people-and-society-evidence-review/>

[10] [http://www.artshealthandwellbeing.org.uk/appg-inquiry/Publications/Creative Health Inquiry Report 2017 - Second Edition.pdf](http://www.artshealthandwellbeing.org.uk/appg-inquiry/Publications/Creative_Health_Inquiry_Report_2017_-_Second_Edition.pdf)

[11] <https://www.closer.ac.uk/about/areas-work/data-harmonisation/>

[12] <https://www.closer.ac.uk/news-opinion/2015/longitudinal-studies-to-explore-art-and-health/>

[12] <http://www.artsforhealth.org/research/artsengagementandhealth/>

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