

Cultural attendance and public mental health – from research to practice

Key words:

Culture;
arts;
museums;
libraries;
participation;
public health;
fairness

The research on the health benefits of intensive engagement with creative and cultural activities through art therapy and workshops led by artists is well recognised in the literature on cultural impact. In general, this engagement involves small numbers and, in the current climate, is unlikely to receive sufficient investment to make a difference at a population level. Less recognised is an emerging field of epidemiological research on the health impact of 'general cultural attendance'. This provides evidence that simply going to a museum, art gallery, film or concert on a regular basis increases longevity, and that culture is a separate variable. This article summarises this evidence and looks at the strategic implications for cultural organisations from the perspective of a practitioner. If cultural attendance can help address health inequalities, and if the best way to overcome the psychological and social barriers to cultural attendance is personal contact with a trusted guide, the article outlines a system where voluntary and statutory organisations can refer people to cultural organisations who might benefit from them. The former would need to be able to guarantee a high quality and friendly welcome that recognises the needs of first-time users from excluded groups. Developed among a network of cultural organisations with voluntary and public sector partners, such a system could reach sufficient numbers to have a health impact on a population level.

ANALYSIS

Mark O'Neill

Director of Policy,
Research and Development,
Glasgow Life, UK

Correspondence to:

Mark O'Neill
Director of Policy, Research
and Development
Glasgow Life
20 Trongate Road
Glasgow
G1 5ES
UK

Email: Mark.O'Neill@
glasgowlife.org.uk

The interdisciplinary science of human well-being has burgeoned in the past decade, questioning many of the dichotomies (mind–body, individual–social) that have pervaded Western thinking for thousands of years about what human life is like, especially since the Enlightenment (eg. Huppert *et al*, 2005). These tensions remain, however, as the assumptions are deeply embedded in our culture. For example, there is friction between the medical and the social or community models of health, and in particular mental health; the former focusing on the biology of the individual, and the latter on their relationships and environmental influences, especially the human context of family, work and culture. In the cultural domain, the dichotomy is between those who argue for the 'intrinsic' value of culture 'for its own sake' and those who promote participation for 'instrumental' reasons, such as education, social cohesion or

well-being (Holden, 2004). At the same time, the democratic demand for accountability and transparency increasingly requires evidence for the impacts attributed to all publicly-funded services. Is there evidence that participation in culture does have a health benefit? If there is, what kind of participation is required to achieve this impact? How should cultural services respond to evidence of this kind? Can evidence-based practice be reconciled with a holistic view of human life? This article reviews these issues from the perspective of a cultural practitioner¹ searching for an evidence-based, holistic approach to providing services that have a positive impact of the lives of as many people as possible.

There is a growing body of scientific evidence that shows that taking an active part in creative activities like visual art, music-making or writing, supervised by an art therapist or a cultural professional, have a measurable impact on physical

and mental well-being (see for example Windsor, 2005; Cohen *et al*, 2006; Oster *et al*, 2006). There is also a lot of evidence that the quality of people's immediate environment makes a difference to how quickly they recover from an illness. This dates back to Roger Ulrich's 1984 study, which showed that men in hospital recovered from an operation much more quickly if their ward window overlooked a grove of trees rather than a brick wall (Ulrich, 1984). But what about less intensive cultural activity or briefer experiences of environments such as those that take place during attendance at cultural and heritage institutions?² Having worked in museums for over 25 years, I became increasingly aware that intensive, small-group projects could never be funded on a scale sufficient to benefit all the people who could take advantage of them. These projects benefit the individuals involved and play a crucial role in helping institutions like museums to understand the needs and interests of target groups, especially excluded or vulnerable people who might experience social and psychological barriers to visiting traditional museums and similar cultural institutions (Economou, 2004; O'Neill, 2007). However, the numbers involved in projects will never accumulate to a scale sufficient for a population level health impact. If cultural institutions learn from such projects they should be able to attract more visitors from these groups. These visitors will, in general, have less intensive cultural experiences – simply visiting museums and art galleries, going to the cinema or live music events or even reading books, rather than engaging in creative activity over a number of workshops. Does this less concentrated form of cultural participation have an impact on health and well-being? There is a growing body of research by university and state epidemiologists that cultural attendance of this kind does make a difference to people's mental and physical well-being, such a difference in fact that people live longer as a result. This research began in Sweden in the mid-1990s, but its findings are being confirmed and developed all over the world. The Scottish Government (Ruiz, 2004), The Arts Council of England (Staricoff, 2004) and various academics and think-tanks have produced summaries of what research shows about the social and health impacts of culture, but these make only occasional references to the epidemiological research. This article attempts to summarise the literature on the health impacts of general cultural attendance and explores some of the implications for both public health and cultural organisations. It argues that general cultural attendance should be

included in public health planning and specifically in social prescribing. It makes recommendations regarding how cultural organisations could prepare themselves to respond to the research findings. The scale of the opportunity is such that a population-level health impact could be generated substantially within existing, or even reduced, resources through partnerships to mobilise cultural institutions in a strategic way.

Cultural attendance lengthens lifespans

The first study, by Bygren and colleagues, was published in 1996 and explored '*attendance at cultural events, reading books or periodicals, and making music or singing in a choir as determinants for survival: Swedish interview survey of living conditions*'. It found that '*attendance at cultural events may have a positive influence on survival*' and, like many research reports, recommended further research:

'Long-term follow-up of large samples with confounders that are well controlled for and with the cultural stimulation more highly specified should be used to try to falsify the hypothesis before experiments start.' (Bygren *et al*, 1996; p1577)

One such large-scale study was reported in 2000 (Konlaan *et al*, 2000). This aimed to narrow the focus to '*ascertain the possible influence of attending various kinds of cultural events or visiting cultural institutions as a determinant of survival*'. Approximately 10,600 individuals were interviewed in 1982/83 and followed up with respect to survival for 14 years (up to 31 December 1996). The study was controlled for '*age, sex, cash buffer, educational standard, long-term disease, smoking, and physical exercise*'. They found '*a higher mortality risk for those people who rarely visited the cinema, concerts, museums, or art exhibitions compared with those visiting them most often*' and concluded that '*attendance at certain kinds of cultural events may have a beneficial effect on longevity*' (Konlaan *et al*, 2000; p174).

There is no space in this paper to discuss the psychological and physiological mechanisms that give rise to these effects – and the researchers are frank that these are not clear. They are also clear that there may be a lurking variable that means that what we are seeing is association, not a causal connection. It might be, for example, that people who are motivated to get out more and engage with life, live longer. This issue was addressed in a 2001 study (Johansson *et al*, 2001), which aimed to assess '*how changes in habit of attending cultural events in the community might predict self-reported health*'. They

studied just under 3,800 adults over a 12-year period and found that *'those who became culturally less active between the first and second occasion, or those who were culturally inactive on both occasions ran a 65% excess risk of impaired perceived health compared to those who were culturally active on both occasions'*. The study further found that *'those who changed from being culturally less active to being more active had about the same level of perceived risk as those active on both occasions'*. They concluded that *'[t]hese results could be in agreement with a causal influence of stimulation.'* They also found that cultural stimulation is a *'perishable commodity'*, such as physical fitness, for cultural participation to help maintain well-being, and requires regular engagement to realise the benefits. And, like sport and physical activity, the benefits can be achieved by starting participation at any age, and recovered after a period of inactivity. In terms of public health, they recommended that *'while recruiting new consumers would ... promote health, continued frequent replenishment of the cultural stimulation may be just as important'* (Johansson *et al*, 2001; p229).

Continuing their large-scale controlled studies, Bygren and colleagues (2009a) reported on a randomly selected cohort of over 9,000 Swedish cancer-free adults aged 25–74 who were identified in 1990–91 to determine whether attendance at cinemas, theatre, art galleries, live music shows, and museums made a difference to cancer-related mortality. They followed up those who were still alive on 31 December 2003. The results were adjusted for age, sex, chronic conditions, disposable income, educational attainment, smoking status, leisure time, physical activity, and urban/non-urban residency. They found that death from cancer was 3.23 times more likely among rare attendees and 2.92 times more likely among moderate attendees (these estimates have a 95% accuracy). They concluded that the *'results, if replicated, imply that promoting attendance at cultural events could lead to improved urban population health'* (Bygren *et al*, 2009a; p229).

In order to make an international comparison, Bygren worked with American colleagues, studying 1,244 individuals who took part in the 1998 General Social Survey in Austin Texas and assessing the impact of attendance at *'leisure or recreational activities'*, which included art exhibits, dance performances, operas or classical recitals, movies, live popular music and plays. Even after controlling for age, gender, marital status, race, number of children, subjective social class, employment status, household income, and

educational attainment, they found a *'significant association between cultural activities and self-reported health'* (Wilkinson *et al*, 2007).

Culture as a separate variable

Perhaps the benefit is not cultural, but simply the result of the social interaction that often accompanies cultural engagement, despite all the controls? There is evidence from an Israeli study that even solitary cultural engagement makes a real difference. The research (by gerontologists) found that men in their 70s who read for as little as 20 minutes a day lived longer than those who did not. Their conclusion was that *'leisure activities devoid of social or physical benefits may nonetheless contribute to improved aging, predicting reduced mortality among men'* (Jacobs *et al*, 2008). The fact that purely mental events triggered by reading result in extended lifespans not only confirms that culture is a separate variable from the social, but also confirms the link between mental well-being, engagement in culture and physical well-being. This study is also relevant to the speculation that it might be simply the physical activity involved in walking around a museum or attending the cinema or theatre that produces the impact, a subject also addressed by Glass and colleagues (1999). This study found that *'social and productive activities that involve little or no enhancement of fitness lower the risk of all cause mortality as much as fitness activities do'*. They concluded that:

'This suggests that in addition to increased cardiopulmonary fitness, activity may confer survival benefits through psychosocial pathways. Social and productive activities that require less physical exertion may complement exercise programmes and may constitute alternative interventions for frail elderly people' (Glass *et al*, 1999; p478).

While questions about the transferability of the research from Sweden and America to other countries may remain, similar findings have been replicated as far afield as Japan and the Lebanon. The Japanese study (on whether interest in art was a significant indicator of the quality of life of adults over 20) found that *'the important factors ... in the mental component ... were regularity of sleep, not living alone, eating breakfast, interest in art, and drinking alcohol'* (Kimura *et al*, 2000). In a study of over 1,200 mothers in a poor district in Beirut, a study by the Center for Research on Population and Health concluded that:

'Two indicators of maternal cultural participation, namely watching entertaining television and attending movies/art exhibitions, were found to be significantly associated to child health status after controlling for other risk factors. The quality of water, the quality of local health services, and maternal education were also significantly associated with child health status. Household income, child gender, and household dampness had no significant association with child health status in this context... Maternal cultural participation was a significant predictor of child health status in impoverished urban communities. Improving child health through culturally focused interventions for mothers, especially in deprived areas, may be great.' (Khawaja et al, 2007; p117)

Confirmation of the findings in Finland (Hyyppä et al, 2006) is also significant, as it has a health profile that is very different to that of Sweden, with rates of heart disease, smoking and alcohol problems much more similar to those of Britain.

Randomised controlled studies

Bygren and colleagues' (1996) hypothesis, not having been falsified by 'long-term follow up of large samples with confounders that are well controlled for and the cultural stimulation more highly specified', was subject to 'experiments'. One hundred and one public health workers agreed to take part in a 'randomised controlled trial'. Fifty-one were randomly assigned to engage in an arts experience of their choice once a week for eight weeks. They selected films, concerts, art exhibition visits or singing in a choir, while the remaining 50 did not change their lifestyle. Perceived and physical health were measured before and after. The results showed an improvement in the intervention group and a decrease among controls during the period, leading the researchers to conclude that 'fine arts stimulations improved perceived physical health, social functioning, and vitality' (Bygren et al, 2009b). There is supporting evidence about the health benefits of singing in a choir from a Glasgow study by Hillman (2002).

Another study, by Clow and Fredhoi (2006), studied the stress levels of London City workers before and after a brief (30 minutes) visit to an art gallery, using the stress hormone cortisol as an indicator. They found that 'the observed drop in cortisol was rapid and substantial; under normal circumstances it would take about 5 hours of normal diurnal decline for cortisol levels to fall to this extent'. Given the significance of excess stress in mental

and physical ill health, their finding that 'the gallery visit caused rapid normalization (recovery) from the consequences of high stress' is significant.

While the researchers in each study are cautious about generalising the findings of even the largest scale studies, taken together this body of research amounts to convincing evidence by medical and public health researchers that cultural attendance provides a distinct stimulus to human beings that has an impact on their well-being to such a degree that it prolongs their lives. Criticisms of this work as being positivist and reductionist (eg. Bennett & Belfiore, 2008; p102) are assuming a complete mind-body separation, where emotional and perceptual experiences do not interact with the biochemical functioning (and vice versa), an archaic model of human functioning. Far from being reductionist, this research gives us a clearer picture of the depth of the impact that formally organised culture has on people, but without making assumptions that limit the nature of the experience. Culture, created by people, provides a complex stimulus to other people, who seek it out because they value the experience. Given the complexity of the processes involved, it is unlikely that there is a single vector of causation but a complex of cumulative interactions. The 'stimulus' needs to be able to engage people, who need to be willing to open themselves to the experiences involved. The original Bygren and colleagues' (1996) study speculated that one of the features that cinema, music and visual art share is the power of their non-verbal dimensions. What these also have in common is an unlimited potential for individuals to become as involved as they wish, cognitively and emotionally and either alone or with people. This is a noteworthy characteristic of the 'cultural stimulus' and means that the experiences are self-regenerating in a positive cycle: the better they are, the more one seeks them out, akin to a benign addiction. This kind of engaged experience has been described by the American psychologist Csikszentmihalyi as 'flow'. In *Beyond Boredom and Anxiety: Experiencing flow in work and play*, he describes how activities that people can engage with at levels of complexity that suit their knowledge and skill produce a deep sense of concentrated immersion. In other words, the experience must not be so simple as to be boring or so complex as to generate anxiety – but also have the richness and complexity to increase as the participant becomes more engaged (Csikszentmihalyi, 2000).

Another key characteristic of cultural experiences is that they enrich the sense of life being meaningful. Here again it is important to be realistic.

People rank cultural activities as less important than close personal relationships and a rewarding job. But such rankings are abstractions; in a more holistic model, people need to have somewhere to go with their loved ones, they need meaningful leisure when they are not working. Cultural attendance makes an essential contribution to the quality of life, and should form an integral part of any public health policy. In an era where there is increasing awareness that government solutions to social problems under perform or fail because of unintended consequences arising out of complexity, the importance of holistic approaches is clearer than ever. One response to this need for an analysis that sees individuals in a less atomistic way is the prevalence of ideas of non-economic forms of 'capital' in social analysis and policy discourses. Ideas like human capital (education and skills), social capital (the network of relationships of trust), cultural capital (knowledge and skill related to valued forms of culture and its institutions) attempt to explain aspects of society where opportunity is the result of structural factors and not as the outcome of the effort of atomised individuals. This framework conceptualises the individual as inheriting a range of knowledge and skills from their family and milieu, which influence their ability to, for example, benefit from school or from the existence of free libraries and museums (see for example, Bourdieu & Darbel, 1991; Putnam, 2000).

Beyond false dichotomies

This research supports attempts to dissolve an apparent clash of interests between the instrumental aims of policy-makers and the intrinsic aims of cultural professionals (Holden, 2004). Cultural participation does have a side-effect of improved well-being, but only because of its intrinsic qualities. It is possible to imagine someone taking physical exercise and getting the benefits, motivated solely by health concerns; this seems much less likely to work for culture. While someone might decide to become more active, to 'get out more' for the sake of their well-being, cultural participation seems unlikely to be sustained unless it sparks a genuine interest. Thus, while promoting cultural attendance because it has a health impact is a perfectly reasonable, evidence-based public policy, to be effective the cultural provision has to be of a quality to compel attention and sustain engagement.

Historically, this issue has been confused because the Victorians assumed that the impact of culture would be to make people more (or less) moral (Bennett & Belfiore, 2008). This is not

as naïve as it is sometimes portrayed, given the intensity of cultural experiences and, in particular, the sense of wholeness and meaningfulness that they bring. The evidence suggests, however, that the effect of the stimulus may be morally neutral. It seems just as likely that ideologically-shaped cultural provision in undemocratic countries would provide a similar whole-person stimulus (though it may be that the resonance of the stimulus is reduced due to the lack of freedom). However, there is a strong ethical dimension implicit in this research. If engagement with culture enriches people's experience to the degree that it creates healthier, more flourishing lives, then the issue of democratic access is critical. Far from being a matter of consumer choice unrelated to issues of inequality and social justice, if cultural participation is indeed a matter of life and death, then the obligation is on cultural organisations to provide access on a basis that is fair is axiomatic. A key implication is that the obligation conferred on cultural organisations by public funding is not simply to provide for existing audiences, but to address the inequalities in cultural capital which, far more than consumer choice, influence who uses them and who does not.

Practical implications

Having reviewed this literature, and accepted that 'general cultural attendance' has a significant health benefit, Glasgow Life (the charity responsible for the city's museums, libraries, arts, sport, community halls and youth services) drew a number of conclusions. Great deals of social prescribing, art therapy and community art projects involve participation in relatively intensive, creative or learning activities. These have a great value for the individuals participating. Such projects can also help cultural services to develop services for new target groups. However, expanding these forms of engagement to the scale required to achieve a population-level impact is likely to be difficult in the current financial climate. However, the epidemiological research suggests that a strategy promoting less intensive attendance at cultural organisations among vulnerable communities may be able to achieve a health impact at a population level. Social prescribing, art therapy and community arts projects should have providing inductions to mainstream cultural services as a core aim, so that people's capacity to use these on their own is enhanced. For cultural services, especially those that are free at the point of use ie. libraries and museums, and where an increase in users does not lead directly to increased costs, a large-scale project

may be possible within existing resources. This paper has focused mainly on the research relating to cultural participation, but the research on impact of sport and physical activity on health and well-being in a wider sense than the direct cardiovascular benefits of aerobic exercise has similar implications for policy and practice.

‘Referral-ready’ museums’ cultural services

What would such a large-scale programme look like? If the main aim is to persuade non-users (or lapsed users) to try museums and libraries, basic signposting to cultural amenities would be an important first step. However, development work in a range of fields shows that, for many people, especially those who lack the confidence to try out new things for whatever reason, the key is to have a trusted, friendly guide. What is needed, therefore, is a referral system that links members of the health service or voluntary organisations with staff in cultural organisations, so that the former can refer their patients/clients/members to the latter.

What would cultural institutions such as libraries and museums need to do to be a responsive partner in this network, to receive people referred by these organisations – to become what may be called ‘referral-ready’? At a practical level, the basic elements would include the following.

1. An efficient and easily accessible method by which public health and voluntary organisations could refer people to cultural institutions. This would include named contacts for each venue, simple booking procedures, and confidence in the quality and friendliness of the welcome.
2. Front-of-house staff who are trained to provide friendly welcoming inductions in cultural organisations to first-time novice users, including those from vulnerable groups (eg. looked-after and accommodated young people, people with mental health issues).
3. Managers who are trained to support the frontline staff and to frequently refresh their training to maintain their responsiveness to diverse users. The most effective way of embedding this in day-to-day work is a train-the-trainers model.

It is important not to underestimate the culture change involved in points 2 and 3 above – this is a far deeper form of public engagement than is involved in most ‘customer service’ training programmes. Referring organisations have to trust that the people they refer (many of whom will be vulnerable in one way or another) will receive a welcome that is of a consistent, high

quality. There is no doubt, however, that with sufficient will and management support, that it is achievable.

Once a network on this model is working efficiently large numbers can be achieved quite quickly. If a museum or a library can provide a welcome/induction for 15 people a day, five days a week, 50 weeks a year, this gives an annual total of 3,750. If five institutions can achieve this, nearly 20,000 new (or lapsed) users can be welcomed in a year. Although audience retention, usage tracking and outcome evaluation would be major challenges, once these problems are solved, all sorts of potential development become possible. It is difficult to envisage anything but positive outcomes (intended and unintended) from such a programme, bringing significant benefits not just to the people engaged, but to the cultural organisations. Increased usage would only be the most visible of these. Interaction with thousands of new users would help shape the services to make them more appealing to non-traditional audiences, making them part of people’s everyday lives. People who have access to the internet can sign up to receive information about events and activities that would be of particular interest to them. Those who lack internet access can sign up for paper newsletters or mobile phone alerts. There is huge research potential in how such a programme could impact a community. Experimental projects that involve inductions to a number of facilities can explore if there is an optimum number of engagements that supports people to become confident users of cultural services as part of their daily lives.

This process could transform libraries, museums and other cultural venues from locally-based facilities in which access projects take place, into an accessible network of support, entry to any one of which would open up pathways to the cultural and health promotion resources of the entire city or county in which it is based. Within a framework of this kind, the one-off access/outreach projects that so many cultural organisations undertake in response to funding opportunities would become much more meaningful. Engagement with every new group would enable the organisation to learn to welcome future users from that group, and to establish contacts with voluntary and public sector organisations who can, with confidence, refer members of that group in the future. Projects would, at last, feed into service development in a strategic way.

Conclusion

Becoming ‘referral-ready’ in isolation is a contradiction in terms, so Glasgow Life are working on building strategic partnerships with the NHS and the Glasgow Housing Association. Once we have piloted the referral system with these organisations, we will be able to accept referrals from all statutory and voluntary organisations involved in promoting mental health.

Effective partnerships on the scale proposed work best if there is a shared material as well as an idealistic interest; otherwise the difficulties of learning to speak each others’ languages and working together on, for example, agreed evaluation strategies, will not be worth the effort. The shared material interest is greater efficacy and efficiency in the deployment of diminishing resources. Mental health bodies of all kinds would secure access to widely distributed and easily accessible amenities for people who suffer from or are at risk of mental ill health. For the NHS, this model would be a key component of a ‘whole-system’ approach to social prescribing, providing a foundation for more intensive participation in creative or learning activities (Friedli *et al.*, 2009, pp18 & 20). Cultural organisations would secure a strategic approach to both attracting and retaining new users, especially from deprived groups, which are central requirements of national quality standards such as customer service excellence, as is the kind of training staff would need to welcome and induct ever more diverse users. However, many staff and organisations will be equally motivated by shared ideals, by a public service vision of improving the quality of life of individuals, families and communities.

Acknowledgement

I would like to thank three anonymous referees for their very useful comments on the first draft of this article. I would also like to thank my colleagues in Glasgow Life, particularly Calum Guthrie, Nikki Stein, Jill Miller and Niki Smith for their help in articulating the ideas in this article.

Endnotes

¹ I have worked in museums in Glasgow since 1985, eventually becoming Head of Glasgow Museums in 1998, and Head of Arts and Museums in 2006.

² The definition of culture used here is narrower than the anthropological definition (the patterned way of life of a people) but somewhat broader than the traditional definition of ‘high culture’ (classical

music, theatre, opera, ballet), including the cinema and all live music performance. The impact on public health of contemporary culture in the first, anthropological, sense has been discussed in recent work by Carlisle and Hanlon (2007; 2009).

References

- Bennett O & Belfiore E (2008) *The Social Impact of the Arts: An intellectual history*. Basingstoke: Palgrave Macmillan.
- Bourdieu P & Darbel A (1991) *The Love of Art*. Cambridge: Polity Press.
- Bygren LO, Konlaan BB & Johansson E (1996) Attendance at cultural events, reading books or periodicals, and making music or singing in a choir as determinants for survival: Swedish interview survey of living conditions. *British Medical Journal* 313 (7072) 1577–1580.
- Bygren LO, Johansson S-E, Konlaan BB, Grijbovski AM, Wilkinson AM & Sjöström M (2009a) Attending cultural events and cancer mortality: a Swedish cohort study. *Arts & Health* 1 (1) 64–73.
- Bygren, LO, Weissglas G, Wikstrom B-M, Konlaan BB, Grijbovski A, Karlsson A-B, Andersson S-O & Sjöström M (2009b) Cultural participation and health: a randomized controlled trial among medical care staff. *Psychosomatic Medicine* 71 (4) 469–473.
- Carlisle S & Hanlon P (2007) Wellbeing and consumer culture: a different kind of public health problem? *Health Promotion International* 22 (3) 261–268.
- Carlisle S & Hanlon P (2009) Is ‘modern culture’ bad for our health and well-being? *Global Health Promotion* 16 (4) 27–34.
- Crow A & Fredhoi C (2006) Normalisation of salivary cortisol levels and self-report stress by a brief lunchtime visit to an art gallery by London City workers. *Journal of Holistic Healthcare* 3 (2) 29–32.
- Cohen GD, Perlstein S, Chapline J, Kelly J, Firth KM & Simmens S (2006) The impact of professionally conducted cultural programs on the physical health, mental health, and social functioning of older adults. *The Gerontologist* 46 (6) 726–734.
- Csikszentmihalyi M (2000) *Beyond Boredom and Anxiety: Experiencing flow in work and play*. San Francisco, CA: Jossey-Bass.
- Economou M (2004) Evaluation strategies in the cultural sector: the case of the Kelvingrove Museum and Art Gallery in Glasgow. *Museum and Society* 2 (1) 30–46.
- Friedli L, Jackson C, Abernethy H & Stansfield J (2009) *Social Prescribing for Mental Health – A guide to commissioning and delivery*. London: Care Services Improvement Partnership. Available from: <http://www.nmhdu.org.uk/silo/files/social-prescribing-for-mental-health-.pdf> (accessed November 2010).
- Glass TA, de Leon CM, Marottoli RA & Berkman LF (1999) Population based study of social and productive activities as predictors of survival among elderly Americans. *British Medical Journal* 319 (7208) 478–483.
- Hillman S (2002) Participatory singing for older people: a perception of benefit. *Health Education* 102 (4) 163–171.
- Holden J (2004) *Capturing Cultural Value*. London: Demos.
- Huppert FA, Baylis NVK & Keverne B (2005) *The Science of Well-Being*. Oxford: Oxford University Press.
- Hyypää MT, Mäki J, Impivaara O & Aromaa A (2006) Leisure participation predicts survival: a population-based study in Finland. *Health Promotion International* 21 (1) 5–12.
- Jacobs JM, Hammerman-Rozenberg R, Cohen A & Stessman J (2008) Reading daily predicts reduced mortality among men from a cohort of community-dwelling 70-year-olds. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 63 (2) S73–S80.

Johansson SE, Konlaan BB & Bygren LO (2001) Sustaining habits of attending cultural events and maintenance of health: a longitudinal study. *Health Promotion International* 16 (3) 229–234.

Khawaja M, Barazi R & Linos N (2007) Maternal cultural participation and child health status in a Middle Eastern context: evidence from the urban health study. *Child Care Health Development* 33 (2) 117–125.

Konlaan BB, Bygren LO & Johansson S-E (2000) Visiting the cinema, concerts, culture or art exhibitions as determinant of survival: a Swedish fourteen-year cohort follow-up. *Scandinavian Journal of Public Health* 28 (3) 174–178.

Konlaan BB, Bjorby N, Weissglas G, Karlsson LG & Widmark M (2000) Attendance at cultural events and physical exercise and health: a randomised controlled study. *Public Health* 114 (5) 316–319.

Kimura T, Ogushi Y, Haruki Y & Okada Y (2000) Is interest in art effective in health-related quality of life? Results of a cross-sectional survey on lifestyle and health promotion. *Tokai Journal of Experimental Clinical Medicine* 25 (3) 141–149.

O'Neill M (2007) Kelvingrove: telling stories in a treasured old/new museum. *Curator* 50 (4) 379–400.

Oster I, Svensk AC, Magnusson E, Thyme KE, Sjödin M, Aström S & Lindh J (2006) Art therapy improves coping resources: a randomized, controlled study among women with breast cancer. *Palliative Support Care* 4 (1) 57–64.

Putnam R (2000) *Bowling Alone: The collapse and revival of American community*. New York: Simon & Schuster.

Ruiz J (2004) *A Literature Review Of The Evidence Base For Culture, The Arts And Sport Policy*. Edinburgh: Scottish Government. Available from: <http://www.scotland.gov.uk/Publications/2004/08/19784/41510> (accessed November 2010).

Staricoff RL (2004) *Can the Arts Have a Positive Effect on Health? A review of the medical literature*. Abingdon: Arts Council of England.

Ulrich RS (1984) View through a window may influence recovery from surgery. *Science* 224 (4647) 420–421.

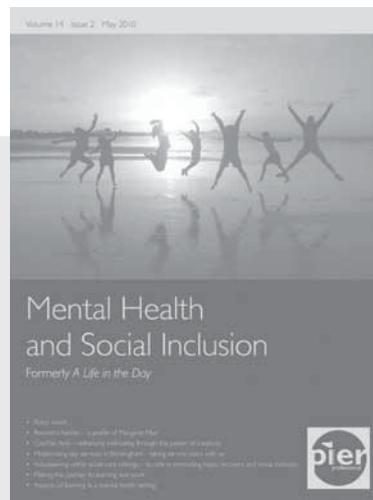
Wilkinson AV, Waters AJ, Bygren LO & Taro AR (2007) Are variations in rates of attending cultural activities associated with population health in the United States? *Public Health* 7 226.

Windsor J (2005) *A Study of the Association between Arts Engagement and Health*. Abingdon: Arts Council of England.

Mental Health and Social Inclusion

Formerly *A Life in the Day*

Mental Health and Social Inclusion Journal focuses on social inclusion issues for people who have mental health problems. It looks at how people can enjoy fuller lives in their local communities – finding jobs, learning new skills, volunteering or participating in arts, sports and leisure activities. Other areas explored include housing, finance, spirituality, cultural diversity, friendships and relationships. The Journal is practical in focus and enables readers to keep up to date with innovative approaches, best practice, difficulties, dilemmas and possible solutions.



ALL SUBSCRIPTIONS INCLUDE FREE ONLINE ACCESS TO ALL ISSUES OF THE JOURNAL

Save 20% on two-year subscriptions

- INSTITUTIONAL – print and online (50+ online users)*
- INSTITUTIONAL – print and online (2 to 49 online users)*
- INSTITUTIONAL – print and online (1 online user)
- PERSONAL* – print and 1 online user at a home address
- STUDENT/SERVICE USER/CARER* – print and online

	1 YEAR		2 YEARS	
	UK	ROW	UK	ROW
■ INSTITUTIONAL – print and online (50+ online users)*	£719	£739	£1,150	£1,185
■ INSTITUTIONAL – print and online (2 to 49 online users)*	£369	£389	£590	£625
■ INSTITUTIONAL – print and online (1 online user)	£219	£239	£350	£380
■ PERSONAL* – print and 1 online user at a home address	£59	£79	£95	£125
■ STUDENT/SERVICE USER/CARER* – print and online	£45	£65	£75	£105

* Personal subscriptions must be paid from a personal account and sent to a home address

* VAT will be charged on all multi-user subscriptions

ISSN: 2042-8308 (Print); 2042-8316 (Online)

Subscribe online at www.pierprofessional.com/mhsflyer
or call Pier Professional on +44(0)1273 783720

