CHAPTER 21

Culture and public health activities in Sweden and Norway

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Introduction to culture and public health activities in Sweden and Norway

This chapter builds on a recent review of research on cultural activities for health promotion in Norway and Sweden (Cuypers et al. 2011). Our aim in this chapter, however, is to provide the reader with some illustrations of the wide range of ongoing activities in Sweden and Norway concerning culture and health.

The development of international research with regard to culture and health has had a profound influence in Norway and Sweden. For instance, the formation of choirs was mentioned in a public health context in the United Kingdom, the United States, Australia, Indonesia, Venezuela, Israel, Palestine, and Germany as an instrument for creating increased cohesiveness and improved health (e.g. Cohen 2009; Clift et al. 2010; De Quadros and Dortewitz 2011). A Nordic network for music, culture, and health, based in Helsinki, has been established with regular meetings on culture and health for researchers, health practitioners, and politicians taking place annually in rotation between Denmark, Norway, Sweden, Iceland, and Finland.

This chapter will show that there is extensive interest in research on cultural activities and health in both Norway and Sweden, ranging from musical activities, theatre and dance, to the visual arts and literature. The examples we describe are mainly regional (counties and municipalities) with very few of them organized on a national level. First of all we will describe the political status of cultural activities and health in the two countries. Although Sweden and Norway are similar countries and have similar historical experiences there are some important differences. Both countries have been dominated during the post-war era mainly by social democratic policy; however, during the most recent period Norway has had social democratic governments while Sweden has had a more conservative government. A short overview of politics will be followed by a description of Swedish and Norwegian activities focused on women and also in three life periods: the school years, working age, and old age.

The Swedish and Norwegian contexts

Sweden

In 2000 the Swedish Governmental Commission on Public Health (Year 2000 Public Health Commission; see SOU 2000) published its future plans for public health work in Sweden. The commission was initiated by a social democratic government. The final document has a chapter on the importance of cultural activities. The report had been preceded by several years of scientific summaries and political negotiations, with the political discussions taking place at three levels: state, county, and municipality. For the first time in this kind of official document, cultural activity was mentioned as an important vehicle for public health work. The publication of the document was followed by a series of political processes. Prompted by this publication many counties and municipalities seriously considered the use of cultural activities in public health work. At the same time there was lively international activity in the field, both in public health work and in research.

With a new Swedish government the national authorities continued to stress the potential of cultural activities in health promotion and the need for both research (humanistic as well as biological and psychological) and evaluations in this field (Year 2009 Cultural Politics Commission; see SOU 2009). Several regional evaluations have been launched as a result of this commission. In addition there has been coordination between the ministries for culture and for health and social security (including national health insurance). This has resulted, for example, in three regional evaluations of the effects of cultural participation for patients on sick leave and also as a potential means for decreasing sick leave. The southern region (Skåne) is coordinating research on cultural participation and rates of sick leave nationally and there are evaluations going on in Skåne as well as in the north (Västerbotten) and in the west (Halland). An example of such activities will be described later (in Cultural activities during three age periods/Working age) (Bygren et al. 2009). This interest from the government was prompted by the high rates of sick leave during the period 1997–2003. However, these initiatives have not so far resulted in any specific permanent financial support. The National Board of Public Health produced a position paper for research (National Board of Public Health 2005) but has since then not given priority to it.

The Swedish Parliament started the Society for Culture and Health in 2007. This has organized seminars and served as a political pressure group for a continuous dialogue between politicians, researchers, and producers of cultural activities. It is also disseminating knowledge in the field and stimulates financial support of cross-disciplinary research (see

<http://www.kulturradet.se/>).The parliamentary society also collaborations closely with the Centre for Research on Culture and Health at the University of Gothenburg, which has organized several national panel discussions (<http://www.ckh.gu.se/>) (see Bjursell and Westerhäll 2008).

Norway

During the years 1997–99 the Norwegian Government started a number of projects in the area of culture and health in order to test the potential of cultural activities for health promotion and illness prevention. There were several reasons for this. In the early 1990s social researchers had encouraged private and public organizations to make systematic evaluations of the effects of cultural activities. There was an increasing prevalence of what was labelled 'diseases of society' (Hjorth 1994). Increasing sickness absence in Norway—as in Sweden—prompted the need to search for new strategies, while increasing wealth in Norway did not seem to result in improved health equity (Elstad 1985). In addition, national surveys showed that participation in cultural activities was less common among lower social classes (Kulturdepartementet 1992). The UNESCO project during the World Decade for Cultural Development (1988–98) also contributed to the increased attention to culture and health interventions from the points of view of public health and culture policy (UNESCO 1996).

The initiative in Norway reached a peak in the years 1997–99 when the government decided to assign 15 million Norwegian crowns during a 3-year period to development work in the field of cultural activity and health. Twenty municipalities and counties took part in this project. The governmental initiative was monitored by a national advisory committee for cultural activity and health with its central node at the Centre for Culture, Health, and Care in Levanger. When the national project came to an end the national agencies left responsibility to regional and local actors. After this, initiatives in the field were taken on at regional and local levels.

One example has been the initiative for cultural activity and health in Nord-Trondelag county as well as in the municipalities of Porsgrunn, Bergen, Trondheim, and some boroughs in Oslo. During later years national agencies have facilitated regional and municipal work by means of different new laws and official instructions. This development was reinforced in response to the increasing numbers of elderly people as well as increasing socio-economic differences in cultural activity and health. One example is the Cultural Walking Stick and the cross-disciplinary centre for Culture, Health, and Care in Levanger—both of which would not have materialized without strong regional and local engagement and financial input. As part of the Cultural Walking Stick project, Levanger municipality has organized several development projects in which music, dance, and visual arts have been used for health promotion and disease prevention among the elderly. One of the driving forces in the establishment of music therapy in homes for patients with dementia has been Audun Myskja (2012), who has developed music therapy techniques as well as controlled scientific studies in dementia care. A clear trend during later years is that activities in the field of culture and health which were previously confined mainly to the psychiatric sector are nowadays a visible part of governmental initiatives in public health work in general. Today there are laws in Norway (on public health and on culture) as well as official instructions that can be used as arguments for increased utilization of cultural activities in both health promotion and in care.

Epidemiological results from the HUNT study (Cuypers et al. 2012) have been used as arguments in regional strategies and plans. For instance, initiatives have taken into account that, according to HUNT, some municipalities have few cultural activities and poorer public health compared with other areas. This has been an argument for allocating more resources to those areas. The county initiatives have stimulated several developmental projects such as Culture for Life, Writing for Life, and Singing as Health Promoting Work.

Comparing Norway and Sweden, the Norwegian national agencies coordinating regional and municipal cultural activities with national ones have been maintained to a greater extent than in Sweden. The emphasis in cultural national policy in Norway has been less on the elite and more on public interests in cultural activities (Åse Kleveland 2012, unpublished) and also less on commercial sustainability than in Sweden. One example is the national Swedish Organization for Concerts (National Concerts) which was founded in 1968 but disbanded by the government in 2010. It had organized music performances across Sweden, particularly in the genres of chamber music, choir, and art music as well as jazz and folk/world music. Its Norwegian counterpart, Concerts Norway, has a similar history, although it has more wide-ranging tasks, among them to organize school concerts in the whole of Norway. It was established in 1967 to stimulate regional music communities and is still active.

National statistics on cultural activities in Sweden and Norway

Statistics Sweden, the national agency for population statistics, has been producing valuable statistics on cultural activities in the Swedish adult population at 8-year intervals since the early 1970s (see Chapter 8). Unfortunately production of these kinds of statistics has decreased since 2006 and information on cultural participation is therefore less extensive during more recent years than previously.

A very large data base has been created in Nord Tröndelag in northern Norway with data on cultural activities in the population. This study is affiliated to Trondheim University and comprises data collected in 1984–86, 1995–97, and 2006–08 on 125,000 Norwegians representing the average citizen. Extensive data on health parameters and on cultural activities from this study will provide unique possibilities to establish relationships between cultural activity and health (Krokstad et al. 2012). The Swedish Twin Registry is being used for a study of the importance of genetics and cultural experiences during childhood/adolescence for the development of musicality as well as the development of other kinds of cultural competence. In this study, which is based upon 8000 twins aged between 27 and 54, the researchers will examine the importance of cultural experiences during childhood and adolescence for the development of emotional competence.

Experiences from music therapy as a stimulus for the field in general

In Norway there is a strong tradition of supporting various forms of music therapy. Theoretical and practical development of such forms of therapy has taken place under the guidance of Even Ruud

(1997) in Oslo and has an been inspiration for all the Nordic countries. Rune Rolvsjord and Christian Gold have established a music therapy research group at Bergen University in Norway. Their teaching programme and their development of music therapy theory has also been of importance to all the Nordic countries. The researchers in this group have published qualitative as well as quantitative evaluations of the health effects of several kinds of music therapy. For instance, they have recently published a study of 144 patients (in Norway, Austria, and Australia) with non-organic mental disorders and low therapeutic motivation who were randomly allocated to 'treatment as usual' and music therapy, respectively. The results show that music therapy was clearly better for improving collaboration with psychiatric therapy than 'treatment as usual' (Gold et al. 2013). In Stockholm a school of music therapy has been established at the Royal College of Music.

At a regional university hospital in Trondheim (Vaag et al. 2012), all hospital staff were offered participation in a rock music choir project which ended in a public concert. This seemed to appeal particularly to certain groups (middle-aged women and those with a lower level of education). This is of interest since many cultural activities appeal only to those with higher education. Questionnaire data indicated beneficial effects on mental health among the participants. From a public health point of view it is important to find diversified cultural activities that appeal to large proportions of employees (see Chapter 8 for more details on this project).

The Royal College for Higher Music Education in Stockholm has also been active in the field of formal music therapist training and music therapy research for many years and has been of major importance for work on the use of musical activities in rehabilitation and psychotherapy (see Hammarlund 1993; Paulander 2011).

A Swedish centre has examined the influence of nature-based vocational rehabilitation in a specially designed rehabilitation garden (Pálsdóttir et al. 2013). Significant changes were measured regarding perceived occupational values in daily life, symptoms of severe stress, and return to work. Both the rate of return to work and symptoms of severe stress were significantly associated with a change in everyday occupation. In the interviews, participants explained that after the rehabilitation programme they had a slower pace of everyday life and that everyday occupations were more often related to nature and creativity. This could be interpreted as nature-based rehabilitation inducing changes via meaningful tasks in restorative environments, leading to a positive change in the perceived value of everyday occupations. These findings have prompted discussions in Sweden on the importance of experiences in nature for health promotion in general.

Norwegian researchers have also investigated the potential of nature–culture–health (NaCuHeal) activities in terms of their health promoting properties. Research from three evaluation studies focused on how art, music, nature, and culture have a beneficial impact on health and wellbeing (Bratt-Rawden and Tellnes 2011). The first evaluation study described the subjective experiences of people taking part in NaCuHeal activities at the National Centre for NaCuHeal in a Norwegian municipality. The second evaluation study highlighted the extent and way in which people use folk-medical practice, administered in a non-professional setting, in modern culture to maintain, improve, or change their health status. The third evaluation presented results from a study conducted by the Eastern Norway Research Institute in collaboration with a rehabilitation centre between 2008 and 2009. The three evaluations were based upon 90 ethnographic interviews and open narratives from men and women with long-term illness. The main finding was that NaCuHeal experiences may help participants construct a meaning, identify coping mechanisms, and revitalize their resourcefulness. Hidden resources were awakened and participants felt good about themselves—the salutogenic factors in a person's life are strengthened. These studies indicate how art, music, and NaCuHeal activities may have a beneficial effect on health and wellbeing (Bratt-Rawden and Tellnes 2011).

Volunteering in a Norwegian municipality has been examined in relation to cultural and health determinants (Lorentzen et al. 2012). Members of voluntary associations are engaging in unpaid work, offering their time to assist with cultural activity groups and organizations. Multiple logistic regression was used in order to assess the statistically independent impact of the volunteering component, with the results pointing to links between volunteering, culture, and wellbeing.

Cultural activities and women

An evaluation of the effects of cultural activities for women with burnout syndrome has recently been performed in Stockholm within the framework of the project 'Culture Palette in Healthcare Centres'—culture activities for women with burnout. This was a controlled study carried out in ambulatory healthcare. The aim of the programme was to decrease symptoms of exhaustion, improve self-rated health, and increase the sense of coherence by means of cultural activities. It was hoped that if there were scientifically unequivocal findings from the evaluation of this programme it would stimulate the establishment of new forms of cultural activity programmes in healthcare centres for women with burnout. In this project the expertise of different culture producers was utilized and musicians, dancers, actors, visual artists, and movie experts acted as culture 'introducers'. The joint effect of these 'culture health palettes' has been evaluated in four healthcare centres in greater Stockholm, partly by means of standardized questionnaires and partly by means of qualitative interviews. Participating women were aged between 25 and 65 and all had a diagnosis of burnout syndrome (or, according to Swedish terminology, exhaustion syndrome) with extreme fatigue, cognitive symptoms, and sleep disorders arising after long-lasting stress. Other symptoms include pain, irritability, and lack of concentration.

The activities took place at the healthcare centre once a week for 3 months. The following activities were included:

- Interactive theatre: an experienced actor introduced poetical texts and poems and then initiated and participated in discussions with the participants regarding the thoughts, emotions, and experiences evoked by the texts.
- Movies: after a movie performance a movie expert initiated discussions among the participants about the experiences and thoughts evoked by the movie.
- Vocal improvisation (under the guidance of a performance artist and pianist): after musical improvisation the participants painted a picture showing the emotions, thoughts, and pictures evoked during the improvisation.

- Exploring dance: participants improvised dance movements under the guidance of a dance therapist and teacher of rhythm. The dance movements were staged according to the situation in the room and with focus on bodily awareness. Afterwards the group participants discussed their experiences during dance.
- Mindfulness and contemplation: participants contemplated and practised mindfulness with an experienced instructor. After this thoughts, emotions, pictures and body sensations were discussed in the group.
- Cultural show: after a theatre performance including music, song, and dance with the theme of food and bodily awareness the participants discussed their thoughts regarding the body and the food with the actor.

Sessions in each of the six different programmes lasted for 90 minutes. Four different healthcare centres tested each programme on two consecutive occasions. After 2 weeks with one programme there was a new programme for the next 2 weeks, and so on. This means that each participant experienced each programme on two consecutive occasions. Accordingly each person was offered 12 occasions to participate during a 3-month period. Interviews and the distribution of standardized questionnaires took place before the start as well as 3 and 6 months later. There were no more cultural activities after 3 months. A control group (without cultural activities) was followed in a parallel way during the whole process. Randomization to experimental and control groups took place at each healthcare centre. The selection of healthcare centres took into account socio-economic characteristics and the unemployment rate in the area.

Standardized scales were used for the assessment of exhaustion, sense of coherence, self-rated health, and alexithymia. Self-figure drawings were used for qualitative analyses.

The results showed decreased exhaustion, improved self-rated health, and decreased alexithymia (accordingly an improved ability to differentiate feelings). An unexpected finding was that the healthcare staff also benefitted.

This project has aroused interest throughout Sweden. It is likely that it will spread to many areas in Sweden and perhaps also to the other Nordic countries. Developing and adapting cultural programmes so that they fit these kinds of patients could cross-fertilize healthcare and culture production. The cultural activities that were offered to these women could help them understand what makes them vital, confirmed, curious, healthy, and creative. Above all, the project illustrated that there could be synergistic effects within the whole caring system.

Cultural activities during three age periods

Cultural activities are of potential importance for health promotion in childhood, during the occupationally active years, and in older age. There are activities in the field for all the three age groups, and several examples show how counties have been stimulated by international discussions to start cultural activities for health promotion. Governments have been supportive in several of these projects.

School years

There have been several interesting trials of cultural interventions in school-age children. One of the most interesting projects is '*Vi slår på trummor, inte på varandra*' [We beat drums, not one another] which took place during a whole school year in Skåne in southern Sweden. All children had one lesson every week during which they were taught to play drums. This project may have been stimulated by an American project reported by Bittman et al. (2004, 2005) who showed that patients in dementia care and the care staff both benefitted from drums with dancing. Reduced sick leave and staff turnover were observed.

In the 'We beat drums' project positive effects were shown on both language and mathematics scores as well the proportion of pupils reaching high school standard, particularly in the year preceding high school (a 28% increase for that group). In addition, reduced problems with petty vandalism (such as burning litter

Fig. 21.1 Ceramic objects produced by teenagers in a creative activity during a period of a couple of hours. The teenagers had no previous experience or knowledge of moulding clay.

bags) were observed in the school. This project was supported both financially and administratively by the county (Göteborgs-Posten 2013) (Fig. 21.1).

Depression is increasing globally, and it is estimated that it will be one of the conditions causing the greatest burden of disease in 2030. Exercise is considered to be an active strategy for preventing and treating depression and anxiety in adults and school-aged children. Participation in physical activities can also improve self-esteem. An organized, non-competitive, leisure-time intervention is considered beneficial for increasing physical activity in the young. Dance is a well-established and popular form of physical activity, particularly for young women. In a social context, dance might serve as a protective factor in preventing mental illness and reducing the severity of psychosomatic symptoms. 'Dance for Young People' (Duberg et al. 2013) was a successful Swedish project intended to decrease the incidence of psychological symptoms. Through the school healthcare system, 171 girls between the ages of 13 and 18 with psychosomatic symptoms, tiredness, or depressive symptoms were recruited for this intervention, which took place in 75-minute sessions twice a week after school for 8 months. Randomization took place before the start. The control group had to wait while the intervention was ongoing in the intervention group and also during the follow-up. This means that participants in the control group only had normal curriculum. A significant beneficial effect on self-rated health was observed in the dance group compared to the control group not only 12 months after the start (i.e. 4 months after end of the intervention) but also 20 months after baseline. Dancing may accordingly be a preventive measure to decrease the incidence of psychological symptoms in young girls.

An interesting example of cultural activities designed for a community with clear implications for long-term health in young people is the activity in Namsos, a town north of Trondheim. Namsos experienced violent destruction in 1940 during the Second World War. Most of the buildings were destroyed and, most importantly, serious conflicts arose between families who had supported the Germans ('Quislings') and families who supported the opposition. These conflicts still have a tendency to poison the atmosphere in the town. A rock music centre, Rock City, the national resource centre for pop and rock in Norway, opened in Namsos in 2011, and the internationally known rock musician Åge Aleksandersen has been engaged in creating an improved social atmosphere and helping young people in Namsos work through these kinds of conflicts, for instance by means of participation in the production of a rock musical about family conflicts caused by war experiences.

Working age

One example showing activities in this field for people of working age is the KROKUS project in Västernorrland County in northern Sweden. This project (or rather group of projects) was designed for people of working age. The idea was that cultural activities organized at or through the workplace may increase cohesiveness and also stimulate creativity. The county politicians saw the possibility of combining the interests of regional industries with those of regional culture producers, such as theatres, dance companies, orchestras, and jazz bands, in health promotion. Several pilot projects were started with financial support from government funds, one of which was evaluated by our research group (Theorell et al. 2007). In a pilot study of four large workplaces in the county, cultural activities occurred in the workplace once a week during working hours for a period of 3 months. Standardized questionnaires were used for the assessment of working conditions (self-reported psychological demands, decision latitude, and social support from workmates and superiors) and health (symptoms of depression and exhaustion as well as sleep disturbances) before the start and after 3 months. In addition, on these occasions blood samples were drawn for the assessment of endocrine and immune system parameters. On each occasion participants were asked to rate their emotional state on a visual analogue scale before and after the cultural activity. Separate scales were used for joy–sadness, relaxation–tension, and alertness–fatigue. There was no control group in this pilot study, so inferences about causality cannot be made. However, the results showed that participants who had more positive reactions than others to the events were also those who had the most favourable development of mental health and immune system parameters during the 3-month study period (Theorell et al. 2009).

The KROKUS project (Hartzell and Theorell 2007) was based upon the collective principle that cultural activities organized through workplaces—preferably during working hours and for as many employees as possible—create the optimal basis for improved cohesiveness and creativity. One of the conclusions was that there has to be a diversity of cultural activities since employees have different preferences. Another initiative supported by the Swedish Union of Local Government Officers, the Swedish National Council for Cultural Affairs, the Assurance Company Förenade Liv, and the local county council was based upon the idea that the possible health effects of cultural activities offered to individual employees in medical care should be evaluated (Bygren et al. 2009). This was designed as a randomized controlled trial. There were 51 employees in the municipality of Umeå (a university city in northern Sweden) randomly allocated to the intervention group and 50 to the control group. Both groups of participants had assessments performed prior to starting and 2 months later. In the intervention group the participants could choose which activity they wanted to participate in once a week for the 8 weeks of the study. Using standardized questionnaires (SF-36, Short Form Health Survey) the research demonstrated that participants in the cultural activities group had a more favourable development of physical health, social functioning, and vitality during the study period than participants in the control group. No differences in the development of physiological variables (immunoglobulin and cortisol) were observed. The intervention and follow-up period of 8 weeks is relatively short; longer interventions together with longer follow-up periods of at least a year would be of interest to ascertain whether longer involvement in a cultural activity is sustainable and, if it is, what impact it might have on health.

The project in Umeå was also part of a regional initiative in three counties to explore the feasibility of introducing 'physician recipes for culture' as part of the government's focus on the potential benefits of cultural activities in relation to preventing sick leave. The target group for the 'culture recipes' comprised patients on long-term sick leave. Initial small-scale qualitative follow-up evaluations showed that cultural activities had a vitalizing effect on these patients. Larger evaluations of activities for the prevention of sick leave by means of cultural activities are ongoing. Scientific proof of this would require large samples, comparable control

groups, and long follow-up periods of more than a year. The latter is particularly important since effects on sick leave patterns are notoriously slow to show up. The usual follow-up period of a year or less is too short for such effects. The project in Skåne is planned to include 200 participants and will continue until December 2014. Effects of the cultural activities on the participants will be compared with referents who are not offered such activities (see <http://www.skane.se/sv/webbplatser/valkommen_till_vardgivarwebben/utveckling__projekt/sjukskrivningsprocess/rehabiliteringsgarantin/kultur-pa-recept-20/>).

There have also been initiatives in other parts of Sweden to revitalize workplaces by means of cultural activity. The county surrounding Gothenburg, Västra Götaland, has been active in this field. A good example is the Västra Skådebanan (approximately translated as 'theatre route in the western region'). This organization has existed since 1974 and is financed from both national and regional sources. Its goal is to stimulate cooperation between culture producers and employers. One of the reported findings from companies participating in 'Airis', an evaluation project, is that companies who have participated in the culture programmes have had a decrease in sick leave resulting in financial savings amounting from €30,000 to €130,000 during the project year, depending on the size of the company. Although these projects have not been designed as randomized controlled trials they seem to point at the health promoting potential of cultural activities. In the Airis project (Areblad 2010), the period of cultural activity was preceded by 2 months during which a 'culture producer' (mostly an artist but sometimes a composer or someone with another artistic occupation) had discussions with representatives of different groups of employees and management. During this period the cultural activities in the company were tailored to the particular needs and possibilities of the organization. This is a very important principle for successful introduction of cultural activities in the workplace.

Older age

A Norwegian study of art communication in mental healthcare was conducted on a geropsychiatric ward at a university hospital. Health professionals used semi-structured art dialogues to communicate with patients via works of art. The findings of the study are based on verbatim quotations regarding the experiences of the health professionals in communicating with their patients. Two main categories were identified: the physical domain and the caring domain. Dialogues about figurative as well as non-figurative art forms were found to stimulate and evoke memories; for some patients, these dialogues were an essential step in promoting wellbeing as well as more-being. The dialogues were essential because they provided a key to the patients' inner worlds through associations with artworks. The main conclusion was that both figurative and non-figurative art can open doors to a dialogue with a patient (Ingeberg et al. 2012).

The approach of Ingeberg et al. (2012) was based on an earlier study in which health professionals had dialogues about visual art with patients (Wikström 2003). 'Talking about pictures' was a project for the care of people with dementia. A summary with instructions has been produced in a collaboration between the Fearnley Museum of Art in Oslo and the Museum of Modern Art in Stockholm, using the art collections in the two museums (Kaplan Collections 2013). A booklet was produced within the framework of this programme for use with framed reproductions of objects in the collections. It presents proposals for questions and topics for dialogues based upon the pieces of art. These can be used for support and inspiration when the caring staff discuss the pictures with the patients.

In the 1990s, Wikström et al. (1993) had carried out a randomized controlled trial intervention study concerning the effects of visual stimulation provided in the form of pictures. Pictures for the intervention group were selected based on individual taste and methods in scientific research in art psychology on aesthetic reactions to and perception of art. The paintings were selected because they represented different aesthetic preferences and emotions which may arise in an untrained spectator who is not familiar with academic artistic codes and interpretations of artworks. Two paintings were selected to suit the spectator's taste and the remaining six had an increasing degree of difficulty. The choice of pictures was based on the knowledge that patterns are assumed to be interesting when they contain information that cannot be absorbed immediately but is likely to be absorbed relatively quickly through perceptual and intellectual efforts. Complexity, ambiguity, and variability are associated with high uncertainty and it is important that the levels of information content and uncertainty in a painting are neither to high nor too low, i.e. they should be in balance with the onlooker's ability to perceive a painting.

The study found a significant improvement in the positive mood parameters, happiness, peacefulness, satisfaction, and calmness, and the negative parameters low-spirited, unhappiness, and sadness. Systolic blood pressure decreased and improvement was seen in subjects' medical health status with regard to reported dizziness, fatigue, pain, and the use of laxatives.

The Structure Funds of the European Union financed a health promotion project exploring the effects of visual arts in the work environment. This project was built upon widely recognized high-quality artworks, each of which represented a personal theme with high artistic integrity. The task was to present such a piece of art in a particular room during a specified time period in a number of workplaces. Among other things, indoor architecture, motifs, stimulation, and colour effects were studied and observations were made regarding effects on creativity and when the pieces of art were observed. One of the results from the observations was that pieces of art were often of importance during telephone conversations (Sandström and Wikström 2008).

Conclusion

With support from commissions from national governments in Sweden and Norway, many regional and municipal projects have started in the field of arts and health in both countries. They comprise the elderly, people of working age, and children as well as all forms of art: visual arts, music, dance, theatre, and writing. Some scientific evaluations have been performed but most of the evaluations have been administrative. The field is rapidly gaining popularity and attention.

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