



# Public Autonomy to Solve Chinese DAMA Square-Dancing community noise Weichen Zhang, Yude Zhou, Wenying Zhu, Xiaonan Wang Shanghai Academy of Environmental Sciences Shanghai Engineering Research Center of Urban Environmental Noise Control

## Abstract

Chinese DAMA's Square Dancing is popular in nearly every city of China, which provides a fitness platform for middle-aged people. However, noise pollution caused by square dancing is becoming a new kind of community noises, as the DAMA are always making noise with high sound level to disturb other's quiet living environment. Different from the traffic noise and industrial noise which can be reduced either through sound source control or certain environmental management, the square-dancing noise problem is caused by the different demands between the people of two side, which are the dancing people and the residents nearby. Therefore, Shanghai Environmental Protection Bureau is trying to use "Public Autonomy " instead of the traditional noise control ideas, which aims to build a dialogue platform for the government, DAMA dancers and the affected people, to let these three parties find the equilibrium point of their demands, and finally to solve the new kind of community noise.

Keywords: community noise ; DAMA Square-Dancing; Public Autonomy

## 1 Introduction

## 1.1 DAMA's Square Dancing demand

China's aging population is expanding. According to the research report of prediction on the trend of China's ageing population, from 2001 to 2020, China will be in a stage of rapid ageing, with an average increase of 5.96 million elderly population each year, and the average annual growth rate is 3.28%. To 2020, the aging population will reach 248 million, 17.17% of the population. According to census statistics, the population of people aged over 60 at the end of 2013 has reached 200 million, accounting for 14.9% of the population, and is expected to reach 300 million in 2023. The rapid growth of ageing population has brought a series of social problem, such as the lack of existing urban public activity area and fitness facilities and so on, which in turn restricts the elderly's demands for living quality.

From the perspective of fitness, the square dancing is good for cardiopulmonary function of the older people; and from the point of psychology, it can promote the elderly mood cheerful; Furthermore, it can also maintain a healthy development of the social harmony and stability from the perspective of sociology. Square dancing, therefore, are extensively developing in China and expanding rapidly.

#### 1.2 Close relation between community noise and population density

There are various community noise sources, which is closely related to people's

life. With the increase of population, the amounts of complaints for noise pollution is also increasing correspondently. From the statistical analysis of noise complaints of recent years in Shanghai, it is shown that the number of complaints are significantly larger in urban area than that in suburban area, which mainly because higher population density, confusing classification of public area function, and lack of public activity area in urban area.



Data: Analysis on relation between population and amount of complaints Figure 1 Relationship between noise complaints and population (2008)

#### 1.3 Survey on square dancing

The square dancing spreads around China, but it produced a lot of community noises in the public area which disturb residents nearby. Based on a public survey, the major difficulties to solve the problem are summarized as:

How to judge whether the entertainment noise disturb others?

Who is in charge of the management of the square dancing?

How to conduct the management?

Therefore, investigations were conducted and the results are shown in Figure 2.





Figure 2. Conclusion from social investigation

Clearly, nearly 31% of surveyed people think that the people who organize and participate in square dancing should reduce the noise disturbance to others with self-conscious attitude primarily; Besides, the government, e.g. police, urban management department, residents' committees should guide, educate or take other comprehensive measures to alleviate this kind of contradiction.

## 2 Management difficulties

#### 2.1 Difficulties in obtaining evidence

Law of the People's Republic of China on Preventing and Control of Pollution From Environmental Noise states that the Environmental Protection Bureau conduct supervision and management of the prevention and control of environmental noise pollution , and the police has the right to warn or penalty in accordance with the provisions of the law, to enforce its authority and legal responsibilities.

However, in practice, the police is hard to get the evidence, because they are lack of professional noise monitoring technique. Even the environmental monitoring departments can show up on site to do the noise measurement, the volume has already be turned down by some square dancers. As a result, the problem can't get settled timely and thoroughly, leaving the disturbance still unsolved.

#### 2.2 Lack of persistence for Cooperated governance

For the square dancing occupied large public area, local governments have taken different approaches to solve the noise problem. In order to avoid supervision shuffle among various departments, environmental protection bureau, police department, greening bureau, urban management, publicity and multiple departments have joined to supervise this public activities. Authorities advocate self-conscious to dancing people in various square and park, once of which more than 200 staff were appointed on site to do the management. As a result, the noise pollution was relieved significantly in short term, but deteriorates again due to the lack of a long-term maintenance mechanism.

### 2.3 Infeasibility by merely moral advocacy

Different from the traffic noise, industrial noise, construction noise, community Noise pollution control also depends obviously on cultural and moral level of the public. Thus the community noise can't be solved in the way the other three kinds of noise pollution are controlled.

Because the community noise of square dancing comes from the audio equipment, which is the personal property, and it is operated by someone. As the current regulations have no clear rules to define the noise influence in public, this kind of community noise pollution is highly associated with people's moral standards. If all square dancers take "no disturbance to others" as their ethical standards, the conflict probability will be significantly reduced.

## 3 Laws and regulations in China

Guangzhou took the lead to implement "Regulations on Environmental Noise Pollution Prevention and Control" in 2001. And Beijing released "Measurements for Prevention and Control of Environmental Noise Pollution" in Jan. 1, 2007. By the laws, authority's responsibility, requirements and punishment are clear.

According to the investigation on the complaints in recent years, Shanghai released "Prevention Measures of Community Noise", which has been formally implemented since March 1st, 2013.

By comparing the regulations of the three major cities in China on the prevention and control of community noise pollution caused by DAMA square dancing, it is shown that they have both similarities and differences on the noise control requirements and penalties. Shanghai has limited places, time, and musical instrument for square dancing. Moreover, for the first time in the country, Shanghai has proposed making a convention to regulating the activities of the public. An innovation idea of "people-oriented, Residents Autonomy" is raised, aiming to solve the community noise pollution.

Main	Restriction			Penalty		
source	Guangzhou	Beijing	Shanghai	Guangzhou	Beijing	Shanghai
enterta inment	not exceed the urban regional environmen tal noise standards	control the volume, to avoid interference	Ban at night, forbidden external amplifying device; making regulations to specific areas	The police shall be ordered to correct, and can be fined 200 yuan	The police shall be ordered to correct, and can be fined 200-500 yuan	The police shall be ordered to correct, and can be fined 200-500 yuan

Table 1 noise management on square dancing of the three large city

#### 4 Discussion on Management mode

The current standard system lack the definition for the boundary of the noise pollution, limitation of noise emission,, therefore, the management idea of pollution control should be changed, e.g. for the community noise from the DAMA square dancing, the existing government supervision method can be converted into negotiation by people in two side based on public autonomy, which can provide a new method to solve contradictions among citizens.

Chapter 8 of "Prevention Measures of Community Noise" issued by Shanghai government, states that for the specific pubic area in which noise problem is significant, conventions can be made by the square-dancing organizer, participants and people affected by noise under the guidance of the local government. Based on this statement, the correspondent conventions on reducing noise arising from fitness and entertainment in public has been completed and conducted, which is gained widespread public recognition and welcome, and as a result, the community noise from DAMA entertainment activities had been alleviated.

#### 4.1 More Publicity and education for orderly entertainment

The Noise control convention strengthen the environment propaganda to public residents, and advocate the moral principles of "don't disturb others life" and let people know how to use audio equipment to alleviate the corresponding noise contradictions in social life. The main purpose is to:

- 1. Advocate to citizens creating a quieter and more beautiful urban environment together;
- 2. Guide citizens to conduct fitness and entertainment activities in public orderly;
- 3. Build a dialogue platform between the active participants and the affected people, and explore the balance between the two sides;
- 4. Effectively alleviate the current community noise conflict caused by the square dancing.

## 4.2 Technical control of the audio equipment set by the environmental

#### protection department

The greater the rated power is, the higher the audio equipment's largest volume will be. The environmental protection department suggest that people should choose a place for fitness or entertainment as far as possible away from buildings, residences, hospitals, schools and other sensitive areas. If distance between any sensitive buildings and the active area is less than 50m, equipment with rated power below 5watts should be used in order to reduce the interference to others' life.

Either devices with external amplifier or devices with rated power exceeding 10 watts are forbidden in the public areas having community noise conflict.

Through requirement on rated power for acoustic equipment, the convention, on the one hand, lets the public know how to do fitness and entertainment orderly and politely, and on the other hand it also provides a clear basis for law enforcement for the police, which will result in a more clear definition for the punishment of community noise.

#### 4.3 Platform built for the three parties to discuss the time and area of activity

The Noise control convention is led by local government, established based on the discussion between active participants and the disturbed people. After agreements are achieved on the rights and the obligations of the involved parties, such as the active area and the time, etc., all members involved should comply with the convention.

This kind of management mode, played down the power of the government administration, and strengthen the function of public autonomy. The local government set up a communication platform, to find the tripartite balance of demands, which is conducive to the further civilization. If one party disobey the convention, the convention can also be the evidence for the judgement by authorities, which in turn restrict the behaviors of all the three parties, aiming at a more stable, civilized society.

#### 4.4 The feedback

The management mode has been piloted since 2014 in many districts in the city of Shanghai ,and a good feedback is received: local management departments think that it can guide the orderly public civilization activity; Management of the public area have a good relation with the residents, activities by setting up information platform, it also helps the optimization of the activity order in the public places; Public has established a mutual relationship between those affected and activists , they can reached a consensus on orderly activity, eased the contradiction of the original.

#### 5 Conclusion

In view of conflict caused by the square-dancing noise, China's laws and regulations in the current system is not perfect, the environmental protection department has some difficulties in the evidence collection. So this paper propose to solve these conflicts by a moral propaganda for the premise "to not interfere with other people's", using a "public autonomy through negotiation, establish a new noise control convention" model to deal with this kind of contradiction. After a year trial in Shanghai, the feedback shows that this kind of innovation management mode has relieved the contradictions of square dancing noise, and it can help to order the activities in public fitness entertainment, and can also be used for providing the evidence and corresponding basis for the police to solve the community noise conflict by law.